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RECONNAISSANCE GEOLOGIC MAP, ANALYSES OF BEDROCK AND STREAM  
SEDIMENT SAMPLES, AND AN AEROMAGNETIC MAP OF PARTS  
OF THE SOUTHERN ALASKA RANGE

By

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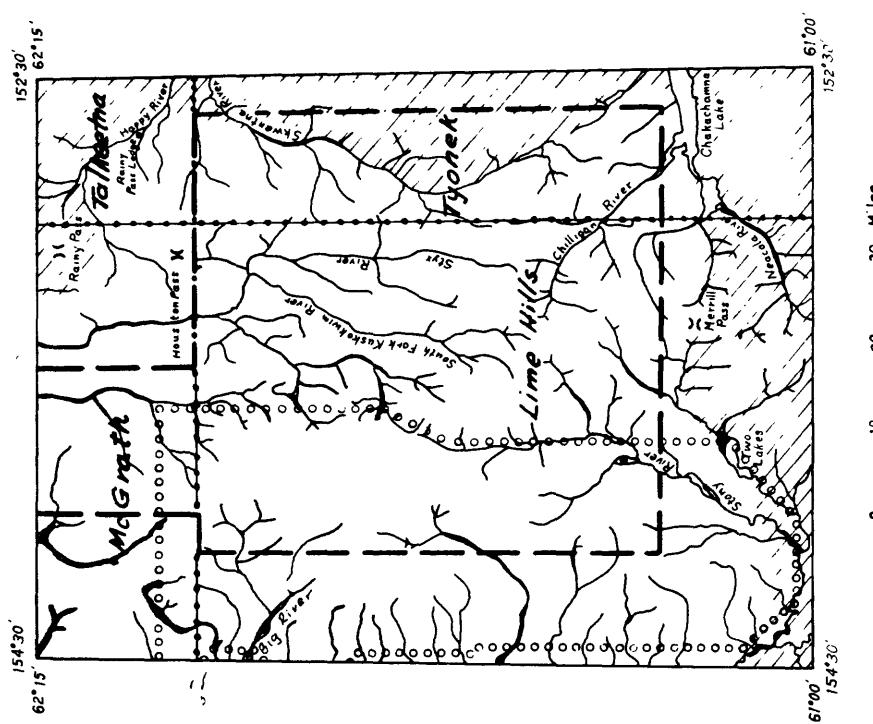
Reconnaissance geologic map, analyses of bedrock and stream  
sediment samples, and an aeromagnetic map of parts  
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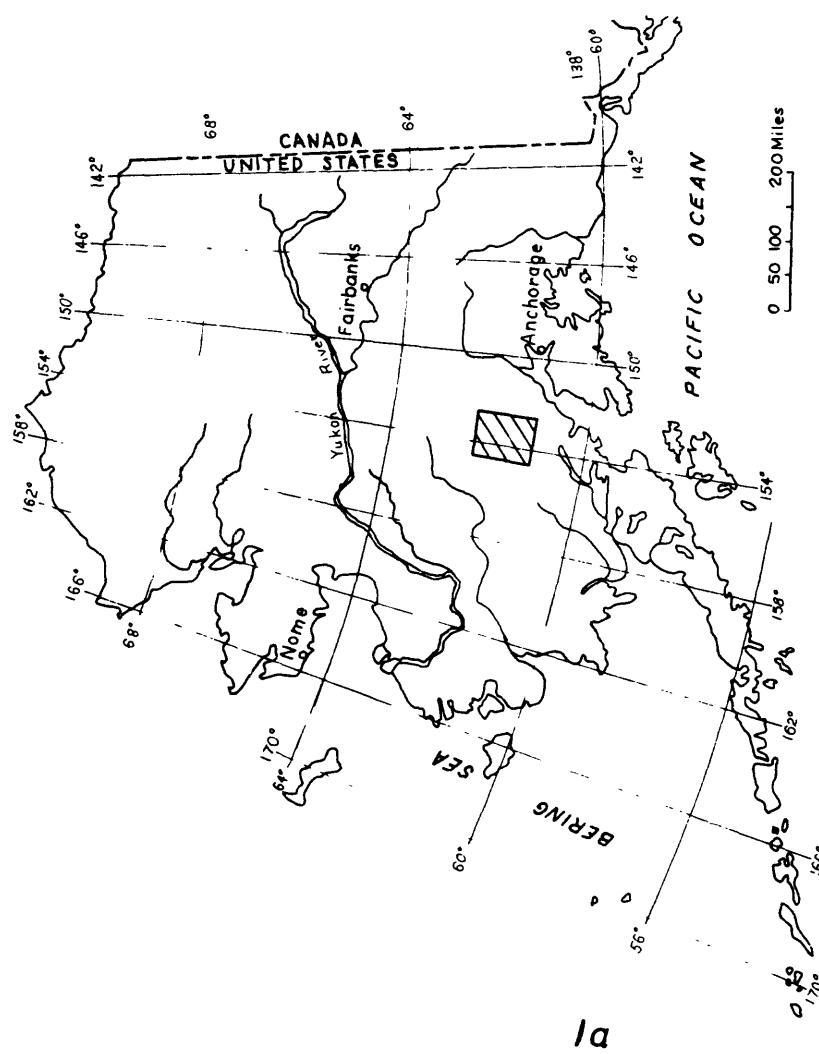
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Introduction

Reconnaissance geologic mapping in the southern Alaska Range in 1969 covered parts of the Lime Hills, McGrath, Tyonek, and Talkeetna quadrangles, an area of about 5,800 square miles (fig. 1). Early geologic investigations in this region include the reconnaissance survey of southwestern Alaska by Spurr (1900), a traverse of the South Fork of the Kuskokwim River in 1902 by Brooks (1911), and the summary report by Capps (1935) on the geology of the southern Alaska Range. Heavy metals investigations in 1967 pointed out a lead-zinc-silver deposit in the Bowser Creek area (Reed and Elliott, 1968a) and other metalliferous deposits south of Farewell (Reed and Elliott, 1968b). In 1968 plutonic rocks west of the Stony River between Two Lakes and the headwaters of Big River were mapped by Reed and Marvin Lanphere. Aeromagnetic maps of the area have been released as an open-file report (Reed and Anderson, 1969). Because of intensified mineral exploration in this region and because there are no geologic maps for much of the area, emphasis in 1969 was placed on mapping the major rock units and gross structural features. This work was supported by a helicopter for six weeks. Particular attention was given to plutons of Late Cretaceous or Tertiary age since most mineral deposits in this part of the Alaska Range appear to be associated with them (Reed and Lanphere, 1969). Because of the reconnaissance nature of the mapping, the amount of geologic



B



A

**Figure 1.** A. Index map of Alaska showing location of Plate I. B. Area of Plate I (geologic map), geology in ruled areas mapped chiefly from aerial photographs. Dotted lines indicate boundaries of McGrath, Talkeetna, Lime Hills, and Tyonek 1:250,000 quadrangles. Open circles outline area of aeromagnetic map (plate 2). Heavy dashed line shows area of sample location maps (plates 3 and 4).

information varies from place to place. Sample localities in areas which, from the air, appeared lithologically uniform have a density of one in tens, or even hundreds, of square miles. Lithologic contacts are moderately accurate, but, in general, no attempt has been made to differentiate facies within a specific unit. Many of the igneous contacts shown on plate 1 were mapped by low-level fixed-wing reconnaissance and no field checks were made. The south and east portions of plate 1 were mapped chiefly from aerial photographs.

Stream sediment samples were collected in conjunction with the mapping. Data for some of the samples became available during the field season, and areas showing high metal values were resampled for confirmation. This accounts for the greater sample density in some areas. During the course of sediment sampling and ground traverses, mineralized float was collected when found, and megascopic descriptions and analyses of selected float samples are appended to the report.

#### Geologic Map

A brief description of the bedrock units is given in the explanation on plate 1. A few additional comments, however, seem warranted. Where two modifiers are used in description of an intrusive rock, the first modifier is the more abundant mineral. For example, biotite predominates over hornblende in a biotite-hornblende granodiorite.

Lithologic identification of the intrusive rocks was determined by 1) modal analyses of stained rock slabs, 2) chemical analyses by the rapid rock method, and 3) examination of thin sections. Smaller isolated plutonic bodies have been tentatively assigned to a particular rock unit on the basis

of mutual similarity in chemistry, trace element content, and modal composition.

Potassium-argon ages for biotite and/or hornblende have been determined for some of the intrusive rocks. The ages fall into four groups: Late Cretaceous (70-80 m.y.), Late Cretaceous-Early Tertiary (60-70 m.y.), Early Tertiary (50-60 m.y.), and middle Tertiary (25-35 m.y.). The vertical position of the intrusive rocks in the left column (Hartman River plutons through Windy Fork stock) is based on these potassium-argon ages. The vertical position of intrusive rocks of uncertain age has no implication as to relative age. Although contact relations indicate that the granodiorite of the Nagishlamina River and the Mount Estelle plutons are older than the Styx River batholith, their age in relation to each other or to other rocks of uncertain age is not known. Biotite from granodiorite shown as unassigned intrusive rocks of Cretaceous or Tertiary age on the north side of Two Lakes has an apparent age of 67.8 million years, whereas biotite and hornblende from quartz diorite on the north side of Chakachamma Lake show discordant ages of 48.2 and 61.5 million years, respectively (Reed and Lanphere, 1969).

Some Tertiary volcanic rocks are thought to be of early Tertiary age, and correlative with early Tertiary extrusive volcanic rocks south of Farewell (Reed and Elliott, 1968b). North of Merrill Pass and between the South Fork of the Kuskokwim River and the Styx River, these volcanic rocks are cut by the Styx River batholith of middle Tertiary age. There are, however, areas of flat-lying, relatively undisturbed volcanic tuffs and flows west of the headwaters of the Chiligan River which may reflect

later volcanism. Furthermore, the varied late Mesozoic and Cenozoic assemblage of granitic and volcanic rocks in this part of the Alaska Range could represent different erosion levels in similar complexes. The Styx River batholith, for example, may be a pluton which has risen through the crust and locally intruded its own volcanic ejecta.

The fault that juxtaposes Paleozoic sedimentary rocks against Cretaceous metasedimentary rocks in the northwestern part of plate 1 is well exposed north of the northeast prong of the Tired Pup batholith. It extends northeastward through the valleys of the Post and Kuskokwim Rivers (where it separates Paleozoic from Cretaceous and Tertiary rocks) thence northeastward through the Tatina River (not shown on plate 1), a distance of more than 40 miles. Its extension to the southwest, between the north-trending prongs of the Tired Pup batholith, is based on aerial photograph interpretation, and the contact between the Paleozoic and Cretaceous rocks in this area is highly speculative.

#### Aeromagnetic Map

The aeromagnetic map shown on plate 2 has been released as an open-file report (Reed and Anderson, 1969) at a scale of 1:63,360, and only a brief discussion of the aeromagnetic data is included here. In order to make the aeromagnetic map more useful in correlating the magnetic data with the geologic map (pl. 1), the aeromagnetic map has been reduced to the same scale as the geologic map (1:250,000).

The aeromagnetic survey covers approximately 1,670 square miles and consists of 71 east-west traverses spaced 1 mile apart. Continuous total-flight traverses were obtained with a Gulf fluxgate magnetometer. The

magnetic data were compiled as a total-intensity magnetic contour map by Lockwood, Kessler, and Bartlett, Inc. The magnetic map is contoured on a 10 gamma interval and has not been corrected for the earth's total magnetic gradient; the total magnetic field intensity in this region increases approximately 5.5 gammas per mile in a northeasterly direction. The southern, central, and northern sectors of the aeromagnetic map were flown at 7,000, 10,000, and 7,500 feet, above sea level, respectively. The boundaries indicating the change in flight elevation are shown on plate 2.

In the southern sector, the magnetic susceptibility of the Tired Pup batholith is sufficient to cause a slight increase in the total magnetic field intensity. Regionally, the magnetic contours show this increase to be approximately linear, suggesting that the rocks are magnetically homogeneous. The contours are notably distorted by the intrusive body in the southeast corner of the map and locally by topographic effects.

The central sector of plate 2 was flown at 10,000 feet. The nearly concentric magnetic anomaly in this sector is one of the most prominent magnetic features within the surveyed area. The amplitude of the anomaly is approximately 300 gammas, and its major axis trends northwestward. A depth determination made graphically from a profile constructed through the anomaly in line with the earth's magnetic field places the top of the magnetic body about 7,500 feet below the aircraft. Since the elevation of the terrain in the vicinity of the center of the anomaly is about 2,500 feet above sea level, the feature responsible for the anomaly is thought to be very near the surface. The relatively high magnetic susceptibility suggests that this feature may be a stock of more mafic composition, or a more mafic phase of

the surrounding granitic rocks. The linear magnetic pattern on the eastern margin of the central sector is probably caused by mafic-rich quartz diorite of the Hartman River plutons which lie just east of Stony River.

The boundary line marking the change in flight elevation from 10,000 to 7,500 feet is indicated on the upper part of plate 2. The granitic rock which forms the west prong of the Tired Pup batholith appears to have a magnetic mineral content similar to the southern part of the batholith. Local magnetic anomalies and distortions associated with the west prong of the batholith are related to areas of high relief.

The east prong of the Tired Pup batholith shows a magnetic pattern signifying a change in the magnetic character of the rock which may be related to a higher concentration of ferro-magnesian minerals. Only widely spaced field observations were made in this part of the batholith and, with the exception of a more mafic border facies immediately west of Sled Pass, the northeast prong appears to be a relatively homogeneous quartz monzonite containing less than 10 percent mafic minerals. The magnetic contours show a definite correlation with the intrusive rocks. Most of the localized magnetic anomalies scattered near the northeast corner of plate 2 are topographic effects, but some of these anomalies are associated with exposed intrusive rocks and others may indicate the location of intrusive rocks covered either by sedimentary rocks or surficial deposits. The Windy Fork stock is well delineated by the magnetic contours and appears to be magnetically similar to the rocks of the east prong of the Tired Pup batholith which suggests the two bodies may be connected at depth.

## Stream Sediment Data

Analytical data for 1,270 stream sediment samples from the area indicated on figure 1 are given in Table 1. The sample localities are shown on plate 3. Samples were collected from the active stream channel wherever possible; where this was not possible, samples were collected from higher level stream deposits adjacent to the channel. The samples were dried, sieved, and the minus 80 mesh fractions submitted for analyses.

Analysis for gold was done by R. L. Miller, R. B. Tripp, and H. D. King, using the atomic absorption method. Results are accurate to +100 percent. The data for the other elements were obtained by six-step semiquantitative spectrographic analysis. The spectrographic analyses are reported in percentage (pct) or parts per million (ppm) to the nearest number in the series 1.0, 0.7, 0.5, 0.3, 0.2, 0.15, 0.1, etc. The precision of a reported value is approximately plus 100 percent or minus 30 percent. The semiquantitative spectrographic analyses were done by K. J. Curry.

The analytical data have been processed by means of a computer program known as GEOSUM which is designed primarily for summarizing and tabulating geochemical data--especially data from semiquantitative analyses. The program output consists of: (a) a tabulation of the data, (b) histograms and cumulative frequency distributions for most of the elements, and (c) a statistical summary which includes geometric means and geometric deviations. Histograms for bismuth, antimony, and tungsten are omitted because of the low number of samples in which these elements were detected (18, 3, and 6, respectively). Data for gold have been recast by the GEOSUM program into the six-step form of the spectrographic analyses.

The results of the analyses of the stream sediment samples are given in Table 1 as analytical values such as 7.0000 ppm, 10.0000 percent, etc., or as qualified values expressed as a letter. These letter codes are N = not detected, L = less than specified limit of detection, G = greater than value shown. Note that the right-most zero digits for each analytical value may or may not be significant. The specified limits of detection are as follows:

Specified limits of detection					
FE PCT	MG PCT	CA PCT	TI PCT	MN ppm	AG PPM
0.05000	0.02000	0.05000	0.00200	10.00000	0.50000
AS PPM	AU PPM	B PPM	BA PPM	BE PPM	BI PPM
200.00000	0.02000	10.00000	20.00000	1.00000	10.00000
CO PPM	CR PPM	CU PPM	LA PPM	MO PPM	NB PPM
5.00000	5.00000	5.00000	20.00000	5.00000	10.00000
NI PPM	PB PPM	SB PPM	SC PPM	SN PPM	SR PPM
5.00000	10.00000	100.00000	5.00000	10.00000	100.00000
V PPM	W PPM	Y PPM	ZN PPM	ZR PPM	
10.00000	50.00000	10.00000	200.00000	10.00000	

Semiquantitative spectrographic analyses by the U.S. Geological Survey are reported as geometric midpoints (1.0, 0.7, 0.5, 0.3, 0.2, 0.15, 0.1, etc.) of geometric brackets having the boundaries 1.2, 0.83, 0.56, 0.38, 0.26, 0.18, 0.12, 0.083, etc. The frequency distributions and histograms are plotted on logarithmic scales and are computed using these brackets as class intervals, for example:

Reported value (ppm)	Limits	
1.0	.83	1.2
1.5	1.2	1.8
2.0	1.8	2.6
3.0	2.6	3.8
5.0	3.8	5.6
7.0	5.6	8.3
10.0	8.3	12.0

On the histograms numbers are shown as powers of 10, for example:

7.0E-01 means  $7.0 \times 10^{-1}$  or 0.7

7.0E 00 means  $7.0 \times 10^0$  or 7.0

7.0E 01 means  $7.0 \times 10^1$  or 70.0

7.0E 02 means  $7.0 \times 10^2$  or 700.0

7.0E 03 means  $7.0 \times 10^3$  or 7,000.0

The histograms are constructed with X's, each of which represents 1 percent of the total number (1270) of samples.

The histograms and the statistics given below them are derived only from data values within the ranges of analytical determination ("analytical values"). The histograms are, therefore, incomplete, and the statistics are biased if data values qualified with N, L, or G codes are present.

Statistical estimates that are unbiased are given at the end of Table 1. The geometric mean is the antilogarithm of the arithmetic mean of the logs of the analyses and an estimate of "central tendency," or of a characteristic value, of a frequency distribution that is approximately symmetrical on a log scale, and is therefore useful for characterizing many geochemical

distributions. The geometric mean is not an estimate of geochemical abundance. The geometric deviation is the antilogarithm of the standard deviation of the logs of the analyses. For further discussion and explanation of geometric deviation, see Miesch (1963, 1967).

In the computations performed to produce the statistical summary at the end of Table 1, no computations are performed where any data values are qualified with the G (greater than) code. Where none of the data values for an element are qualified the mean and deviation should be the same as those given in the preceding section. Where data are qualified with the codes N or L, the estimates of geometric mean and deviation are based on a method devised by A. J. Cohen for treating censored distributions. The application of this method to geochemical problems is described by Miesch (1967). The estimates are unbiased in a strict sense only where the data are derived from a lognormal parent population, but experiments have shown that large departures from this requirement may not greatly invalidate the results. Acceptance and use of the estimates, however, is the responsibility of the individual.

#### Discussion

Geologic mapping, the presence of mineralized float, and the geochemical data delineate areas which may be of economic interest. Although high values for elements of interest are readily apparent from the histograms (Table 1), it is futile to attempt to define background and anomalous values for 1,270 stream sediment samples collected from a diverse geologic environment covering in excess of 1,500 square miles (pls. 1 and 3). There are, certainly, sediment samples that have metal contents of interest to a prospector or economic geologist. But a high metal content

in an isolated sediment sample or a group of samples can be misleading if local background information is not available. Background, in turn, is dependent on the geologic environment, chemical mobility of the element in question, and other factors. Significant, anomalous values are indicated only by thorough orientation surveys confined to areas of known geologic or mineralogic environment. Stream sediment sampling in 1969 was of a reconnaissance nature, and background information on drainage basins is not available. Because many metal occurrences in this region are found within, or adjacent to, plutonic rocks and because these rocks underlie a large portion of the mapped area, analyses of unmineralized plutonic rocks from the map area are given in Table 2 to aid in establishing local background values. The samples selected for analyses (plate 4) are unaltered, and represent the most typical lithology at the sample locality. The analyses given in Table 2 indicate that the base metal content of the plutonic rock samples falls close to the average abundance for similar rocks as compiled by Parker (1967). This suggests that the anomalous metal contents in sediment samples from streams draining granitic terrain are related to local areas of metal enrichment within the igneous bodies.

The following descriptions are intended to be illustrative rather than comprehensive. Isolated occurrences of mineralized float, for which analyses and a brief megascopic description are given (Table 3, Appendix) are not discussed separately in the text. Some have a sufficiently high metal content to prompt investigation of the source.

#### Area of the Styx River batholith

Sediment samples from streams draining parts of the Styx River batholith and related plutonic bodies are characterized by high metal values (well

above those of unaltered rock samples) for several elements, notably silver, copper, lead, tin, and zinc. In a general way, these values define a northwest-trending area bounded on the southwest by the Chilligan River and on the northeast by the Skwentna River and extending northwest to the South Fork of the Kuskokwim River. The batholith intrudes Mesozoic metavolcanic and metasedimentary rocks, Tertiary volcanic rocks, and the Mount Estelle pluton. The batholith is cut by northwest-trending shear and fault zones which locally have served as structural guides for metal deposits. Rocks bordering some shear zones are altered and contain disseminated sulfide minerals. Malachite and azurite are present on joint surfaces adjacent to many of the shear zones, and minor copper mineralization is common near the contacts of the batholith and mafic volcanic rocks of Mesozoic age.

In addition to the metals mentioned above, sediment samples from streams draining the hills northeast of Jimmy Lake and northeast-flowing tributaries to the Styx River in the eastern part of the Lime Hills C-1 quadrangle contain high values for arsenic and molybdenum.

In the hills northeast of Jimmy Lake mineralization occurs within altered portions of a biotite granite stock that intrudes sedimentary rocks and probably intrudes the overlying Tertiary volcanic rocks. The volcanic rocks consist of lithic and crystal tuff and contain fragments of slate and graywacke. The stock, probably a satellite of the Styx River batholith, contains fluorite as a characteristic accessory mineral. Sparse float from this area indicates that the granite is locally altered to quartz-sericite-kaolinite and albite, and contains minor amounts of disseminated galena and sphalerite (sample S1). Rare pieces of altered granitic float contain

veinlets (1/8 to 1/4 inch wide) of quartz, galena, sphalerite, and arsenopyrite (sample S2), and quartz-molybdenite veins (sample S3).

East of the Styx River, granodiorite of the Mount Estelle intrusive is cut by northwest-trending shear zones and quartz-feldspar porphyry dikes. The dikes are thought to be offshoots from the Styx River batholith which cuts the Mount Estelle pluton 2 miles to the southeast. Mineralization at the occurrence examined is confined to a shear zone 3 to 5 feet wide, over an exposed length of 30 feet. The occurrence may be representative of the source of other mineralized float found in this area. Granodiorite in the shear zone is altered to quartz, sericite, and albite and contains clots of iron oxide minerals and up to 10 percent sulfide minerals (chiefly pyrite and chalcopyrite (sample S4)). Trace amounts of chalcopyrite are present along fractures and as disseminations in the granodiorite up to 10 feet from the shear zone (sample S5). The shear apparently served as a feeder channel for metal-bearing fluids which locally migrated laterally from the shear along joints and irregular fractures for distances up to 30 feet. Mineralization at distances greater than 10 feet from the shear zone is restricted to a thin veneer of malachite and azurite along joint and fracture surfaces (sample S6).

Small iron-stained zones occur in granodiorite 2,000 feet southeast of the above locality. Float of altered granodiorite collected downslope for these altered zones contain small amounts of disseminated pyrite, chalcopyrite, arsenopyrite, bornite, and tourmaline (samples S7-10). Although the metal content of some of these samples is high, it should be noted that mineralized float is sparse and the oxidized zones, as seen from the air, are small.

Mineralized float (samples S11-16) is present in a small cirque 1 mile to the south (pl. 4). The float is not abundant; the source is probably restricted to the immediate area of the cirque.

A small body of grayish-orange-weathering quartz monzonite is exposed for about 1,000 feet along a ridge east of the South Fork of the Kuskokwim River (samples S17-18) and is thought to be a satellite of the Styx River batholith. The quartz monzonite cuts slates and graywacke, and a monzonite stock tentatively assigned to the Hartman River plutons. The quartz monzonite contains trace amounts of disseminated chalcopyrite and sparse fractures locally contain quartz, chalcopyrite, and minor amounts of other sulfide minerals (sample S19). Soil samples taken along the ridge contain 100-500 ppm Cu, .5-1.5 ppm As, and <200 ppm As.

Altered quartz monzonite float containing 5 to 20 percent sulfide minerals is abundant on a narrow medial moraine on the east side of a small glacier in the northern part of the Lime Hills B-1 quadrangle (samples S20-23). The quartz monzonite is permeated with iron-oxide minerals and is composed chiefly of quartz, K-feldspar, and muscovite. The sulfide minerals occur as small irregular-shaped clots up to 2 cm in diameter, as disseminated grains, and as thin veinlets up to 5 mm wide. Sphalerite (marmatite), galena, and pyrite are megascopically visible, but the presence of tin and silver in the analyses indicate that other minerals, not identified in hand specimen, may also be present. Quartz monzonite in the cirque walls at the northeast side of the glacier is locally iron stained, but the only visible sulfide mineral in these rocks is pyrite. It is likely that the source of the float lies beneath the glacier.

Rock samples (S24-26) from an altered and intensely iron-stained felsic intrusive rock on a tributary to the Styx River (Lime Hills C-1 quadrangle) contain minor pyrite, sphalerite, and galena. The altered rock, which is exposed for about 200 feet along the creek, is composed chiefly of quartz, and sericite, with minor K-feldspar and altered biotite. Sulfide minerals, mostly pyrite, generally constitute less than 1 percent of the total rock. It occurs chiefly as disseminations in the felsite and in quartz veins up to 2 inches wide. Sphalerite and galena occur as thin veinlets up to 2 mm wide and, rarely, as finely disseminated grains in the felsite.

#### Mount Estelle Pluton

Sediment samples from streams that drain parts of the Mount Estelle pluton contain above-average contents of gold, arsenic, copper, silver, and less commonly zinc, lead, and boron. Gold is consistently present in amounts between 0.1 and 1.1 ppm in sediment samples from the streams draining two small glaciers 1 and 2 miles east of Mount Estelle. The glaciers lie within the Mount Estelle pluton. Analyses of mineralized float collected from the moraines at the foot of the two glaciers contain significant amounts of one or more of the following metals: gold, silver, arsenic, copper, lead, antimony, and tin (samples E1-10). Most of these samples are apparently quartz vein rock, but sheared intrusive rock and quartz-carbonate vein rock are also present. The mineralized float is not abundant, although some of the samples analyzed were from boulders up to two feet in diameter. Prominent alteration was not seen in the intrusive, but locally, narrow (0.6 to 2 feet wide) light-colored dikes were observed from the air.

Trace amounts of gold have been reported from gravels at Hellsgate (Spurr, 1900, p. 260) and from both sides of the northern part of the Mount Estelle pluton (Brooks, 1911, pl. 9). It is likely that the source of the gold is the quartz veins which represent a late- or post-magmatic period of metallization associated with the Mount Estelle pluton.

#### McGrath A-2 quadrangle

Molybdenum is commonly present in sediments from streams draining the ridge between Krunka Creek and the West Fork of the Post River. The area is underlain by Paleozoic black shale, argillaceous sandstone and limestone. A narrow stock of quartz monzonite cuts the sedimentary rocks, and small oxidized zones are locally present along the contact. The highest molybdenum values (20-70 ppm) are from streams on the north side of the ridge.

The source of the molybdenum cannot be readily explained. It may be related to shales with above-average concentrations of molybdenum. Molybdenum values of 10-30 ppm occur in sediment samples at Jay Creek three miles to the north (Reed and Elliott, 1968b) which lies in a similar geologic environment. However, it also should be pointed out that other areas of similar geologic environment between the Windy Fork and Post Rivers do not contain anomalous molybdenum values in sediment samples. The molybdenum content of the quartz monzonite stock (sample G39, table 2) is less than 5 ppm, but additional background information for the area between Krunka Creek and the West Fork of the Post River is necessary to determine if the molybdenum values are of significance.

### Hartman River - South Fork Kuskokwim River area

Mineral occurrences in an area bounded by the upper reaches of the Hartman, Stony, and South Fork Kuskokwim Rivers are diverse in nature and are herein grouped for geographical and not geological reasons. Cretaceous metasedimentary rocks, Tertiary volcanic rocks, and granitic rocks of two or more intrusive suites underlie this region.

Veins and float containing sulfide minerals are present in the vicinity of three small glaciers at the head of the south fork of the Hartman River, 6 miles southeast of Sled Pass (samples H1-7, pl. 4). The sulfide minerals are pyrite, arsenopyrite, chalcopyrite, and pyrrhotite. This area is underlain by dark, relatively unmetamorphosed, clastic sediments in which shale or argillite predominates over fine-grained graywackes. These rocks are cut by a series of shears and faults which strike in a generally east-west direction and dip steeply to the north or south. The shear zones are spaced about 300 to 500 feet apart. A small granitic body occurs approximately 1 mile southwest of the three glaciers.

Mineralization is of three types: (1) clastic sediments containing disseminated sulfide minerals adjacent to shear zones (H-1), (2) narrow veins of massive arsenopyrite and(or) pyrite with minor chalcopyrite along shears (H-2), and (3) minor sulfides in quartz veins (H-3 - 6). Disseminated sulfide minerals do not comprise more than 10 percent of the rock and are generally confined to the immediate vicinity of a shear zone. Veins of arsenopyrite and(or) pyrite with minor chalcopyrite are generally less than two inches wide and sparsely distributed. Replacement of adjacent rock is uncommon. Quartz veins, 1 to 6 inches wide, are common throughout the area but are generally barren of sulfide minerals. In veins that contain sulfide minerals, arsenopyrite, pyrite, pyrrhotite, and chalcopyrite seldom exceed

10 percent of the vein material. Trace amounts of gold are present in some sediment samples from this area, but the quartz veins sampled are not auriferous.

Several massive stibnite blocks up to 1 foot across are present in frost-heaved rubble near the top of a ridge and in talus on the west side of the ridge east of Sled Pass (samples H-8-9). The area is underlain by dark gray argillite and interbedded graywacke. The float samples are probably no more than a few feet or a few tens of feet from their source. The inclusion of angular fragments of argillite and the overall brecciated texture of some of the blocks suggest that the occurrence is probably localized along faults or shear zones.

## Appendix

The following megascopic descriptions of mineralized bedrock and float samples are, in some cases, supplemented by whole rock X-ray diffraction analyses and examination of polished sections. The analyses of the samples are given in table 3 and their locations are shown on plate 4.

S-1 Boulder; altered granite consisting chiefly of quartz, sericite, kaolinite, albite, and less than 5 percent disseminated galena and sphalerite.

S-2 Cobble; altered granite, similar to S-1 but with thin veinlets of quartz, sphalerite, galena, and arsenopyrite, trace of chalcopyrite.

S-3 Cobble; partially altered granite with 1 inch wide quartz-molybdenite vein.

S-4 Altered granodiorite (chiefly quartz and sericite) with 5 to 8 percent disseminated pyrite, arsenopyrite, and chalcopyrite.

S-5 Partially altered granodiorite with 3 to 5 percent disseminated pyrite and chalcopyrite; malachite on joint surfaces.

S-6 Granodiorite with malachite and azurite on joint surfaces; hornblende and biotite are slightly altered.

S-7 Cobble; altered granitic rock with 5 to 8 percent disseminated sulfide minerals; chiefly bornite and chalcopyrite.

S-8 Cobble; altered granitic rock with 10 percent disseminated arsenopyrite and chalcopyrite.

S-9 Cobble; altered granitic rock with seams of tourmaline and minor bornite; less than 2 percent bornite and chalcopyrite disseminated throughout; malachite on fractures.

S-10 Fissure filling in quartz monzonite boulder containing tourmaline, chalcopyrite, and arsenopyrite; chalcopyrite disseminated over a width of 10 to 15 cm.

- S-11 Cobble; granodiorite with about 15 percent chalcopyrite interstitial to quartz, K-feldspar, and plagioclase. Float is rare.
- S-12 Cobble; altered felsic rock containing 30 percent sulfide minerals; chiefly pyrrhotite, sphalerite, galena, and pyrite.
- S-13 Boulder; biotite, quartz and actinolite(?) with 5 percent chalcopyrite.
- S-14 Cobble; fine-grained banded sulfides; chiefly pyrrhotite and sphalerite, and minor galena.
- S-15 Boulder; banded fine-grained sulfides similar to S-14. Chiefly pyrrhotite and sphalerite (marmatite) with calc-silicate minerals; minor galena and pyrite.
- S-16 Cobble; white vein quartz containing sphalerite and galena.
- 
- S-17 Grab sample of fine-grained quartz monzonite that contains pyrite and trace amounts of chalcopyrite.
- S-18 do
- S-19 Fracture (1 cm wide) in quartz monzonite filled with quartz, chalcopyrite, pyrite, and trace amounts of other sulfide minerals.
- S-20 Boulder; altered quartz monzonite (quartz, K-feldspar, and sericite) containing about 15 percent irregular clots up to 1 cm in diameter of fine-grained sphalerite, galena, and minor pyrite.
- S-21 Cobble; altered quartz monzonite with thin seams (0.5 to 2 mm wide) of pyrite, sphalerite, and galena.
- S-22 Cobble; altered quartz monzonite containing 3 to 5 percent disseminated galena and pyrite.
- S-23 Cobble; altered quartz monzonite containing about 20 percent disseminated sphalerite, galena, and other unidentified sulfide minerals.
- S-24 Quartz-pyrite vein (1 to 2 cm wide) in bleached felsic intrusive; trace of sphalerite.

- S-25 Iron-stained gouge from 10 cm wide shear zone in bleached/ altered felsic intrusive.
- S-26 Bleached/ altered felsic intrusive with minor disseminated pyrite and small (1 mm wide) veinlets of pyrite and sphalerite.
- S-27 Boulder; mafic rock containing 30 percent massive chalcopyrite and pyrite.
- S-28 Cobble; tourmaline-quartz rock with 20 percent disseminated arsenopyrite, pyrite, and chalcopyrite.
- S-29 Cobble; altered felsic rock with 3 percent disseminated pyrite and galena; limonite and malachite on fracture surfaces.
- S-30 Boulder; altered, sheared, fine-grained igneous rock with minor disseminated pyrite (2%), galena (1 to 2%), and trace of sphalerite and arsenopyrite.
- E-1 Cobble; sheared granodiorite containing minor amounts of disseminated chalcopyrite; malachite on fracture surfaces.
- E-2 Cobble; bull quartz with less than 1 percent galena; probably contains trace amounts of free gold.
- E-3 Cobble; sheared and altered quartz monzonite containing trace amounts of galena, pyrrhotite, and arsenopyrite.
- E-4 Boulder; bull quartz with 20 percent chalcopyrite and trace of arsenopyrite.
- E-5 Boulder; similar to sample E-4.
- E-6 Boulder; granodiorite containing narrow (<1 inch wide) quartz-chalcopyrite-arsenopyrite-pyrrhotite-pyrite veins.
- E-7 Boulder; altered granodiorite with thin (<1 inch) seams of arsenopyrite, pyrite, and chalcopyrite; minor amounts of disseminated chalcopyrite and pyrite.
- E-8 Cobble; banded quartz vein containing tourmaline, arsenopyrite, pyrite, and chalcopyrite.

- E-9 Boulder; altered granodiorite containing 1-inch wide veins of quartz, arsenopyrite, pyrite, and chalcopyrite.
- E-10 Boulder; brecciated quartz-carbonate vein(?) containing less than 10 percent combined pyrite, chalcopyrite, and galena.
- H-1 Graywacke containing less than 5 percent disseminated pyrite and chalcopyrite.
- H-2 Boulder; argillite containing 1-inch wide vein of arsenopyrite (75%), pyrite (10%), and sheared argillite (15%).
- H-3 Three-foot wide quartz vein containing arsenopyrite (10%) and minor chalcopyrite.
- H-4 Boulder; 6-inch quartz vein in argillite containing pyrite, arsenopyrite, and chalcopyrite.
- H-5 Boulder; quartz porphyry containing small veinlets (1 to 2 mm wide) of sphalerite and pyrite.
- H-6 Boulder; argillite with 2-inch wide quartz vein containing tourmaline, arsenopyrite, and pyrite.
- H-7 Boulder; argillite containing 2-inch wide veins of quartz, tourmaline, pyrrhotite, arsenopyrite, and minor chalcopyrite.
- H-8 Float (6-inch diameter); massive stibnite containing 10 percent angular fragments of argillite.
- H-9 Float; as sample H-11, but 12 inches in diameter.
- H-10 Quartz vein 2 inches wide containing less than 2 percent finely disseminated molybdenite. Vein in quartz diorite.
- H-11 Boulder; brecciated quartz diorite containing open space quartz tourmaline veins with 15 percent chalcopyrite and 5 percent pyrite.
- H-12 Boulder; diorite gneiss with tourmaline and disseminated chalcopyrite (15 percent).
- H-13 Cobble; bull quartz containing less than 2 percent molybdenite.

H-14 Cobble; quartz with less than 10 percent sphalerite and pyrite occurring in thin veinlets 1 to 3 mm wide.

H-15 Cobble; quartz, pyrrhotite (40 percent), and minor chalcopyrite.

H-16 Boulder; 2 feet in diameter, sulfide breccia that contains angular fragments of volcanic rock; 60 percent sulfide minerals, chiefly galena and subordinate sphalerite, bournonite, chalcopyrite, and pyrite. Volcanic rocks in cirque to east are locally altered.

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Table 1.—Analyses of stream sediment samples

MAP NO.	SAMPLE NO.	(Map number refers to locality on plate 3)									
		FE PCT	MG PCT	CA PCT	Tl PCT	MN PPM	AG PPM	B PPM	AS PPM	Ba PPM	Be PPM
1	AKI606	7.0000	1.5000	10.0000	0.5000	300.0000	0.0	L	0.0	1000.0000	1.5000
2	AKI605	5.0000	1.5000	2.0000	0.7000	500.0000	0.0	N	0.0	1500.0000	1.5000
3	AKI604	5.0000	1.5000	3.0000	0.7000	300.0000	0.0	N	0.0	1000.0000	1.5000
4	AKI603	3.0000	1.0000	1.0000	0.5000	300.0000	0.0	N	0.0	500.0000	1.5000
5	AKI602	7.0000	2.0000	1.5000	0.7000	700.0000	0.0	N	0.0	1500.0000	1.5000
6	AKI601	7.0000	1.0000	0.7000	0.7000	300.0000	0.0	L	0.0	1500.0000	2.0000
7	AKI607	7.0000	1.5000	7.0000	0.5000	300.0000	0.5000	0.0	N	1500.0000	2.0000
8	AKI608	15.0000	2.0000	1.0000	0.7000	1500.0000	1.5000	0.0	L	300.0000	2.0000
9	AKI609	15.0000	2.0000	1.5000	0.7000	1000.0000	0.0	N	300.0000	1500.0000	1.5000
10	AKI610	20.0000	1.5000	1.0000	0.7000	2000.0000	0.0	L	0.0	300.0000	2.0000
11	AKI611	20.0000	1.5000	0.7000	0.7000	1000.0000	0.0	N	0.0	200.0000	300.0000
12	AKI612	10.0000	1.5000	1.5000	0.7000	1000.0000	0.0	L	0.0	500.0000	1500.0000
13	AKI614	15.0000	3.0000	3.0000	1.0000	1000.0000	0.0	N	0.0	300.0000	1500.0000
14	AKI613	10.0000	2.0000	5.0000	0.7000	1500.0000	0.0	N	0.0	100.0000	1500.0000
15	AKI616	15.0000	2.0000	1.0000	0.7000	700.0000	0.5000	0.0	N	200.0000	1500.0000
16	AKI615	3.0000	0.3000	0.7000	0.3000	300.0000	0.0	N	0.0	200.0000	300.0000
17	AKI617	20.0000	1.0000	0.7000	0.5000	1000.0000	0.5000	0.0	N	150.0000	1.0000
18	AKI618	10.0000	1.0000	0.7000	0.7000	1000.0000	0.0	L	0.0	150.0000	2.0000
19	AKI619	10.0000	3.0000	2.0000	0.7000	500.0000	0.0	N	0.0	150.0000	700.0000
20	AKI620	10.0000	3.0000	1.5000	0.7000	1000.0000	0.0	N	0.0	200.0000	1000.0000
21	AKI621	10.0000	1.0000	0.7000	0.7000	1500.0000	0.0	L	0.0	70.0000	3.0000
22	AKI622	5.0000	0.7000	0.7000	0.5000	1500.0000	1.0000	0.0	N	200.0000	700.0000
23	AKI643	10.0000	3.0000	3.0000	0.5000	700.0000	0.0	L	0.0	150.0000	700.0000
24	AKI641	15.0000	3.0000	5.0000	0.7000	1000.0000	0.0	N	0.0	70.0000	1.5000
25	AKI642	7.0000	2.0000	0.7000	0.7000	500.0000	0.0	L	0.0	200.0000	700.0000
26	AKI655	10.0000	2.0000	0.7000	0.7000	300.0000	0.0	L	0.0	200.0000	700.0000
27	AKI656	10.0000	3.0000	0.7000	0.7000	500.0000	0.0	N	0.0	200.0000	700.0000
28	AKI645	7.0000	1.5000	0.7000	0.5000	1000.0000	0.0	N	0.0	100.0000	500.0000
29	AKI644	10.0000	1.5000	0.7000	0.7000	500.0000	0.0	N	0.0	100.0000	700.0000
30	AKI646	15.0000	3.0000	1.5000	0.7000	700.0000	0.0	N	0.0	150.0000	300.0000
31	AKI647	15.0000	2.0000	0.7000	0.7000	700.0000	0.0	N	0.0	70.0000	500.0000
32	AKI649	10.0000	2.0000	1.5000	0.7000	500.0000	0.0	N	0.0	70.0000	1.5000
33	AKI648	15.0000	3.0000	3.0000	0.5000	700.0000	0.0	L	0.0	100.0000	500.0000
34	AKI650	7.0000	2.0000	0.7000	0.5000	500.0000	0.5000	0.0	N	100.0000	300.0000
35	AKI651	15.0000	3.0000	3.0000	0.7000	700.0000	0.0	N	0.0	150.0000	700.0000
36	AKI652	5.0000	2.0000	3.0000	0.5000	300.0000	1.0000	0.0	N	150.0000	300.0000
37	AKI633	15.0000	2.0000	5.0000	0.7000	700.0000	0.0	L	0.0	150.0000	1.5000
38	AKI632	15.0000	3.0000	5.0000	0.7000	1000.0000	0.0	L	0.0	300.0000	2.0000
39	AKI631	15.0000	2.0000	2.0000	0.7000	1000.0000	0.0	L	0.0	200.0000	300.0000
40	AKI627	10.0000	1.5000	5.0000	0.5000	1000.0000	0.5000	0.0	N	150.0000	1500.0000
41	AKI628	10.0000	1.5000	1.5000	0.5000	1000.0000	0.5000	0.0	N	100.0000	300.0000
42	AKI630	15.0000	3.0000	3.0000	0.7000	3000.0000	0.0	L	0.0	300.0000	1500.0000
43	AKI629	7.0000	1.0000	1.0000	0.5000	1500.0000	0.5000	0.0	N	150.0000	1500.0000
44	AKI634	15.0000	3.0000	1.5000	0.7000	2000.0000	0.0	L	0.0	150.0000	700.0000
45	AKI624	10.0000	1.5000	1.0000	0.5000	1500.0000	0.5000	0.0	N	150.0000	3.0000
46	AKI623	15.0000	2.0000	2.0000	0.7000	1500.0000	0.0	L	0.0	70.0000	1000.0000
47	AKI635	10.0000	1.0000	1.0000	0.5000	500.0000	0.5000	0.0	N	70.0000	700.0000
48	AKI637	15.0000	3.0000	3.0000	0.7000	700.0000	0.0	L	0.0	150.0000	1.5000
49	AKI636	15.0000	3.0000	1.5000	0.7000	700.0000	0.0	L	0.0	300.0000	1500.0000
50	AKI639	10.0000	1.5000	1.5000	0.5000	1000.0000	0.5000	0.0	N	100.0000	1500.0000

TABLE 1 - P-2

MRP NO.	SAMPLE NO.	BI PPM	CO PPM	CR PPM	CU PPM	LA PPM	NB PPM		NI PPM		PB PPM		SB PPM
							N	L	N	L	N	L	
1	AKI606	0.0	N	150.0000	50.0000	0.0	0.0	0.0	10.0000	100.0000	30.0000	0.0	0.0
2	AKI605	0.0	N	50.0000	150.0000	70.0000	0.0	0.0	10.0000	100.0000	30.0000	0.0	0.0
3	AKI604	0.0	N	50.0000	150.0000	50.0000	20.0000	0.0	10.0000	100.0000	20.0000	0.0	0.0
4	AKI603	0.0	N	30.0000	100.0000	30.0000	0.0	0.0	10.0000	70.0000	20.0000	0.0	0.0
5	AKI602	0.0	N	50.0000	150.0000	70.0000	0.0	0.0	10.0000	150.0000	30.0000	0.0	0.0
6	AKI601	0.0	N	30.0000	150.0000	70.0000	0.0	0.0	10.0000	150.0000	30.0000	0.0	0.0
7	AKI607	0.0	N	30.0000	150.0000	70.0000	0.0	0.0	10.0000	150.0000	50.0000	0.0	0.0
8	AKI608	0.0	N	50.0000	150.0000	100.0000	0.0	0.0	10.0000	200.0000	70.0000	0.0	0.0
9	AKI609	0.0	N	50.0000	300.0000	70.0000	0.0	0.0	10.0000	150.0000	30.0000	0.0	0.0
10	AKI610	0.0	N	70.0000	150.0000	150.0000	0.0	0.0	10.0000	150.0000	30.0000	0.0	0.0
11	AKI611	0.0	N	70.0000	150.0000	150.0000	0.0	0.0	10.0000	200.0000	50.0000	0.0	0.0
12	AKI612	0.0	N	50.0000	150.0000	150.0000	0.0	0.0	10.0000	150.0000	50.0000	0.0	0.0
13	AKI613	0.0	N	30.0000	70.0000	50.0000	0.0	0.0	10.0000	150.0000	30.0000	0.0	0.0
14	AKI614	0.0	N	70.0000	150.0000	150.0000	0.0	0.0	10.0000	150.0000	30.0000	0.0	0.0
15	AKI615	0.0	N	70.0000	150.0000	150.0000	0.0	0.0	10.0000	150.0000	50.0000	0.0	0.0
16	AKI616	0.0	N	10.0000	0.0	0.0	0.0	0.0	0.0	15.0000	0.0	15.0000	0.0
17	AKI617	0.0	N	70.0000	100.0000	200.0000	0.0	0.0	30.0000	100.0000	300.0000	70.0000	0.0
18	AKI618	0.0	N	30.0000	100.0000	70.0000	0.0	0.0	50.0000	0.0	150.0000	30.0000	0.0
19	AKI619	0.0	N	30.0000	150.0000	70.0000	20.0000	0.0	10.0000	100.0000	30.0000	0.0	0.0
20	AKI620	0.0	N	30.0000	150.0000	50.0000	0.0	0.0	15.0000	70.0000	20.0000	0.0	0.0
21	AKI621	0.0	N	20.0000	20.0000	50.0000	100.0000	0.0	10.0000	10.0000	50.0000	15.0000	0.0
22	AKI622	0.0	N	15.0000	10.0000	70.0000	20.0000	15.0000	20.0000	15.0000	7.00000	30.0000	0.0
23	AKI643	0.0	N	50.0000	200.0000	70.0000	20.0000	0.0	10.0000	150.0000	30.0000	0.0	0.0
24	AKI641	0.0	N	70.0000	150.0000	100.0000	30.0000	0.0	10.0000	150.0000	50.0000	0.0	0.0
25	AKI642	0.0	N	30.0000	150.0000	70.0000	30.0000	0.0	10.0000	150.0000	30.0000	0.0	0.0
26	AKI655	0.0	N	50.0000	150.0000	70.0000	30.0000	0.0	10.0000	150.0000	70.0000	0.0	0.0
27	AKI656	0.0	N	50.0000	150.0000	70.0000	20.0000	0.0	10.0000	150.0000	50.0000	0.0	0.0
28	AKI645	0.0	N	30.0000	70.0000	70.0000	20.0000	0.0	10.0000	150.0000	70.0000	0.0	0.0
29	AKI644	0.0	N	30.0000	150.0000	70.0000	30.0000	0.0	10.0000	100.0000	50.0000	0.0	0.0
30	AKI646	0.0	N	50.0000	150.0000	70.0000	50.0000	0.0	10.0000	150.0000	50.0000	0.0	0.0
31	AKI647	0.0	N	70.0000	150.0000	100.0000	30.0000	0.0	10.0000	10.0000	150.0000	70.0000	0.0
32	AKI649	0.0	N	30.0000	100.0000	50.0000	20.0000	0.0	10.0000	100.0000	30.0000	0.0	0.0
33	AKI650	0.0	N	70.0000	100.0000	70.0000	30.0000	0.0	10.0000	150.0000	70.0000	0.0	0.0
34	AKI651	0.0	N	70.0000	100.0000	70.0000	30.0000	0.0	10.0000	150.0000	70.0000	0.0	0.0
35	AKI652	0.0	N	30.0000	70.0000	50.0000	20.0000	5.0000	10.0000	10.0000	10.0000	70.0000	0.0
36	AKI653	0.0	N	30.0000	150.0000	70.0000	20.0000	15.0000	10.0000	150.0000	10.0000	30.0000	0.0
37	AKI654	0.0	N	50.0000	300.0000	70.0000	20.0000	0.0	10.0000	150.0000	70.0000	0.0	0.0
38	AKI655	0.0	N	50.0000	150.0000	100.0000	20.0000	10.0000	10.0000	150.0000	50.0000	0.0	0.0
39	AKI656	0.0	N	30.0000	150.0000	70.0000	20.0000	0.0	10.0000	150.0000	30.0000	0.0	0.0
40	AKI627	0.0	N	30.0000	70.0000	50.0000	20.0000	0.0	10.0000	150.0000	15.0000	30.0000	0.0
41	AKI628	0.0	N	30.0000	70.0000	70.0000	0.0	0.0	15.0000	15.0000	15.0000	30.0000	0.0
42	AKI630	0.0	N	70.0000	300.0000	70.0000	20.0000	5.0000	10.0000	200.0000	200.0000	30.0000	0.0
43	AKI629	0.0	N	20.0000	50.0000	50.0000	30.0000	15.0000	10.0000	150.0000	70.0000	20.0000	0.0
44	AKI631	0.0	N	50.0000	200.0000	100.0000	20.0000	10.0000	10.0000	150.0000	150.0000	50.0000	0.0
45	AKI627	0.0	N	30.0000	150.0000	70.0000	20.0000	0.0	10.0000	150.0000	15.0000	30.0000	0.0
46	AKI623	0.0	N	30.0000	30.0000	50.0000	20.0000	20.0000	10.0000	150.0000	30.0000	50.0000	0.0
47	AKI635	0.0	N	20.0000	30.0000	70.0000	20.0000	0.0	10.0000	30.0000	30.0000	30.0000	0.0
48	AKI632	0.0	N	50.0000	150.0000	100.0000	20.0000	10.0000	10.0000	150.0000	150.0000	50.0000	0.0
49	AKI634	0.0	N	50.0000	200.0000	70.0000	20.0000	10.0000	10.0000	150.0000	150.0000	50.0000	0.0
50	AKI636	0.0	N	50.0000	150.0000	70.0000	20.0000	10.0000	10.0000	150.0000	150.0000	50.0000	0.0
51	AKI639	0.0	N	50.0000	150.0000	100.0000	20.0000	10.0000	10.0000	150.0000	150.0000	50.0000	0.0

TABLE 1 - P. 3

MAPNUM SAMPLE	SC PPM	SR PPM	V PPM	Y PPM	ZN PPM	ZR PPM	AU PPM
1 AKI606	15.0000	500.0000	200.0000	0.0 N	200.0000	70.0000	0.0200L
2 AKI605	15.0000	200.0000	200.0000	0.0 N	200.0000	100.0000	0.0200L
3 AKI604	15.0000	300.0000	200.0000	0.0 N	200.0000	70.0000	0.0200L
4 AKI603	15.0000	150.0000	150.0000	0.0 N	150.0000	150.0000	0.0200L
5 AKI602	20.0000	200.0000	300.0000	0.0 N	200.0000	300.0000	0.0200L
6 AKI601	20.0000	150.0000	300.0000	0.0 N	200.0000	100.0000	0.0200L
7 AKI607	15.0000	300.0000	200.0000	0.0 N	200.0000	70.0000	0.0200L
8 AKI608	20.0000	0.0 N	300.0000	0.0 N	300.0000	200.0000	0.0200L
9 AKI609	20.0000	0.0 N	200.0000	0.0 N	300.0000	70.0000	0.0400
10 AKI610	30.0000	0.0 N	300.0000	0.0 N	200.0000	300.0000	0.0200L
11 AKI611	20.0000	0.0 N	200.0000	0.0 N	30.0000	700.0000	200.0000
12 AKI612	15.0000	0.0 N	200.0000	0.0 N	20.0000	100.0000	0.0200L
13 AKI614	30.0000	0.0 N	500.0000	0.0 N	30.0000	500.0000	0.0200L
14 AKI613	15.0000	0.0 N	500.0000	0.0 N	20.0000	0.0 N	0.0200L
15 AKI616	30.0000	0.0 N	150.0000	0.0 N	30.0000	500.0000	0.0200L
16 AKI615	5.0000	0.0 N	150.0000	0.0 N	15.0000	0.0 N	0.0200L
17 AKI617	20.0000	0.0 N	150.0000	0.0 N	50.0000	700.0000	150.0000
18 AKI618	15.0000	0.0 N	150.0000	0.0 N	30.0000	200.0000	150.0000
19 AKI619	15.0000	0.0 N	200.0000	0.0 N	20.0000	200.0000	70.0000
20 AKI620	15.0000	0.0 N	300.0000	0.0 N	150.0000	300.0000	0.0200L
21 AKI621	15.0000	10.0000	150.0000	70.0000	20.0000	0.0 N	0.0200L
22 AKI622	10.0000	10.0000	30.0000	0.0 N	15.0000	0.0 N	0.0200L
23 AKI643	20.0000	0.0 N	150.0000	200.0000	20.0000	200.0000	70.0000
24 AKI641	30.0000	0.0 N	300.0000	200.0000	30.0000	200.0000	150.0000
25 AKI642	20.0000	0.0 N	150.0000	200.0000	20.0000	300.0000	150.0000
26 AKI655	20.0000	0.0 N	100.0000	300.0000	20.0000	0.0 N	0.0200L
27 AKI656	20.0000	0.0 N	100.0000	300.0000	20.0000	200.0000	150.0000
28 AKI645	20.0000	0.0 N	100.0000	200.0000	30.0000	200.0000	300.0000
29 AKI644	20.0000	0.0 N	100.0000	200.0000	30.0000	0.0 N	0.0200L
30 AKI646	20.0000	0.0 N	100.0000	300.0000	30.0000	0.0 N	0.0200L
31 AKI647	20.0000	0.0 N	0.0 N	300.0000	50.0000	200.0000	150.0000
32 AKI649	20.0000	0.0 N	150.0000	200.0000	30.0000	0.0 N	0.0200L
33 AKI648	20.0000	0.0 N	150.0000	200.0000	20.0000	200.0000	150.0000
34 AKI650	15.0000	30.0000	100.0000	200.0000	30.0000	0.0 N	0.0200L
35 AKI651	20.0000	0.0 N	200.0000	300.0000	30.0000	0.0 N	0.0200L
36 AKI652	15.0000	15.0000	150.0000	200.0000	20.0000	0.0 N	0.0200L
37 AKI633	15.0000	0.0 N	300.0000	300.0000	20.0000	300.0000	100.0000
38 AKI632	20.0000	0.0 N	300.0000	300.0000	30.0000	300.0000	150.0000
39 AKI631	20.0000	0.0 N	200.0000	500.0000	30.0000	500.0000	150.0000
40 AKI627	15.0000	0.0 N	500.0000	300.0000	20.0000	300.0000	70.0000
41 AKI628	15.0000	0.0 N	300.0000	300.0000	20.0000	200.0000	100.0000
42 AKI630	30.0000	10.0000	150.0000	200.0000	30.0000	200.0000	150.0000
43 AKI632	15.0000	0.0 N	200.0000	200.0000	30.0000	300.0000	200.0000
44 AKI634	15.0000	0.0 N	200.0000	200.0000	30.0000	200.0000	150.0000
45 AKI624	15.0000	0.0 N	200.0000	300.0000	20.0000	300.0000	200.0000
46 AKI623	20.0000	0.0 N	500.0000	200.0000	30.0000	0.0 N	0.0200L
47 AKI635	10.0000	10.0000	150.0000	70.0000	10.0000	0.0 N	0.0200L
48 AKI637	20.0000	0.0 N	200.0000	200.0000	30.0000	300.0000	150.0000
49 AKI636	20.0000	0.0 N	150.0000	300.0000	30.0000	500.0000	200.0000
50 AKI639	20.0000	0.0 N	200.0000	300.0000	30.0000	300.0000	200.0000

M&P	NO.	SAMPLE	FE PCT	CA PCT	MN PCT	AS PPM	AG PPM	BA PPM	BE PPM
1	5/	AK1638	15.0000	3.0000	0.7000	700.0000	0.5000	200.0000	1.5000
2	2	AK1640	15.0000	3.0000	0.7000	1000.0000	0.0	0.0	3.0000
3	3	AK1657	15.0000	3.0000	0.7000	300.0000	0.0	0.0	1.5000
4	4	AK1654	10.0000	1.5000	0.7000	700.0000	3.0000	300.0000	1.5000
5	5	AK1653	10.0000	3.0000	0.7000	700.0000	0.0	150.0000	2.0000
6	6	AK1659	10.0000	1.0000	0.7000	700.0000	0.0	150.0000	1.5000
7	7	AK1658	7.0000	1.5000	0.5000	500.0000	0.5000	200.0000	1.5000
8	8	AK1661	5.0000	1.0000	0.5000	1000.0000	0.0	200.0000	3.0000
9	9	AK1660	7.0000	1.5000	0.5000	700.0000	0.0	150.0000	1.5000
0	0	AK1662	10.0000	1.5000	2.0000	500.0000	0.0	150.0000	1.5000
1	1	AK1665	15.0000	1.5000	2.0000	300.0000	0.0	100.0000	300.0000
2	2	AK1663	10.0000	1.5000	1.0000	500.0000	0.0	150.0000	200.0000
3	3	AK1664	15.0000	2.0000	1.5000	1000.0000	0.0	200.0000	700.0000
4	4	AK1666	7.0000	1.5000	1.5000	1000.0000	0.0	100.0000	700.0000
5	5	AK1667	15.0000	2.0000	5.0000	0.7000	500.0000	0.0	150.0000
6	6	AK1669	10.0000	1.5000	2.0000	700.0000	0.0	150.0000	2.0000
7	7	AK1668	10.0000	1.5000	3.0000	0.7000	300.0000	0.0	150.0000
8	8	AK1670	15.0000	1.5000	7.0000	0.7000	300.0000	0.0	150.0000
9	9	AK1626	10.0000	1.5000	0.7000	0.5000	500.0000	0.0	100.0000
0	0	AK1625	10.0000	1.5000	0.7000	0.7000	500.0000	0.0	150.0000
1	1	AK1672	10.0000	1.5000	1.5000	0.7000	500.0000	0.0	100.0000
2	2	AK1671	15.0000	1.5000	0.7000	0.5000	500.0000	0.0	150.0000
3	3	AK1202	7.0000	0.7000	0.7000	0.5000	700.0000	0.0	700.0000
4	4	AK1201	7.0000	0.7000	0.3000	0.5000	500.0000	0.0	700.0000
5	5	AK1200	15.0000	1.5000	1.5000	1.0000	1500.0000	0.0	700.0000
6	6	AK1199	3.0000	1.0000	1.5000	0.3000	300.0000	0.0	300.0000
7	7	AK1203	10.0000	0.7000	0.7000	0.5000	2000.0000	0.0	700.0000
8	8	AK1204	15.0000	1.5000	0.5000	0.7000	1500.0000	0.0	700.0000
9	9	AK1198	3.0000	0.7000	0.5000	0.3000	1000.0000	0.0	500.0000
0	0	AK1197	3.0000	1.0000	0.3000	0.3000	1500.0000	0.0	300.0000
1	1	AK1195	0.7000	0.2000	0.2000	0.0500	100.0000	0.0	100.0000
2	2	AK1196	15.0000	2.0000	0.7000	0.5000	500.0000	1.5000	300.0000
3	3	AK1194	7.0000	1.0000	0.7000	0.3000	500.0000	0.0	300.0000
4	4	AK1205	7.0000	1.5000	0.3000	0.7000	2000.0000	0.0	700.0000
5	5	AK1206	7.0000	2.0000	1.0000	0.7000	1000.0000	0.0	300.0000
6	6	AK1207	10.0000	1.5000	0.5000	0.7000	1500.0000	0.0	700.0000
7	7	AK1208	5.0000	1.5000	0.2000	0.5000	1500.0000	0.0	500.0000
8	8	AK1209	10.0000	1.5000	0.3000	0.7000	1500.0000	0.0	500.0000
9	9	AK1200	10.0000	1.5000	0.3000	0.7000	3000.0000	1.5000	700.0000
0	0	AK1211	7.0000	1.5000	0.3000	0.3000	700.0000	1.5000	200.0000
1	1	AK1212	5.0000	1.5000	0.5000	0.7000	0.7000	0.7000	1.0000
2	2	AK1213	10.0000	2.0000	0.7000	0.3000	1000.0000	1.0000	500.0000
3	3	AK1219	0.7000	0.0700	0.1500	0.0500	200.0000	0.0	50.0000
4	4	AK1220	3.0000	1.0000	0.7000	0.3000	700.0000	1.5000	300.0000
5	5	AK1206	10.0000	2.0000	0.5000	0.5000	2000.0000	2.0000	500.0000
6	6	AK1191	10.0000	2.0000	0.5000	0.7000	1500.0000	0.5000	500.0000
7	7	AK1214	3.0000	0.3000	0.2000	0.0200	700.0000	0.0	200.0000
8	8	AK1216	2.0000	0.3000	0.1500	0.0150	300.0000	0.0	150.0000
9	9	AK1215	0.7000	0.0700	0.2000	0.0700	150.0000	0.0	100.0000
0	0	AK1217	0.7000	0.0700	0.1500	0.0700	200.0000	0.0	100.0000

TABLE 1

N 0

TABLE 1

SAMPLE	BI PPM	CO PPM	CR PPM	CU PPM	LA PPM	NB PPM	NI PPM	PB PPM	PPM
5/ AKI1638	0.0	N	70.0000	70.0000	20.0000	10.0000	150.0000	50.0000	0.0
2/AK1640	0.0	N	150.0000	100.0000	20.0000	10.0000	150.0000	50.0000	0.0
3/AK1657	0.0	N	50.0000	70.0000	20.0000	0.0	150.0000	50.0000	0.0
4/AK1654	0.0	N	300.0000	300.0000	70.0000	0.0	150.0000	100.0000	0.0
SAK1653	0.0	N	100.0000	100.0000	70.0000	20.0000	150.0000	50.0000	0.0
6/AK1655	0.0	N	50.0000	150.0000	70.0000	20.0000	150.0000	50.0000	0.0
7/AK1658	0.0	N	30.0000	150.0000	70.0000	20.0000	150.0000	30.0000	0.0
8/AK1661	0.0	N	30.0000	100.0000	70.0000	20.0000	150.0000	50.0000	0.0
9/AK1660	0.0	N	30.0000	150.0000	70.0000	20.0000	100.0000	30.0000	0.0
6/AK1662	0.0	N	30.0000	300.0000	70.0000	20.0000	100.0000	20.0000	0.0
/AK1665	0.0	N	30.0000	150.0000	50.0000	30.0000	100.0000	20.0000	0.0
ZAK1663	0.0	N	30.0000	150.0000	70.0000	20.0000	100.0000	20.0000	0.0
3/AK1664	0.0	N	30.0000	150.0000	70.0000	20.0000	100.0000	20.0000	0.0
YAK1666	0.0	N	30.0000	150.0000	70.0000	20.0000	100.0000	20.0000	0.0
SAK1667	0.0	N	30.0000	150.0000	70.0000	20.0000	100.0000	20.0000	0.0
6/AK1669	0.0	N	30.0000	100.0000	70.0000	20.0000	100.0000	20.0000	0.0
7/AK1668	0.0	N	30.0000	150.0000	70.0000	20.0000	100.0000	20.0000	0.0
8/AK1670	0.0	N	30.0000	150.0000	70.0000	20.0000	100.0000	20.0000	0.0
9/AK1626	0.0	N	30.0000	150.0000	50.0000	30.0000	100.0000	15.0000	0.0
7/AK1625	0.0	N	30.0000	150.0000	70.0000	20.0000	100.0000	30.0000	0.0
/AK1672	0.0	N	30.0000	150.0000	70.0000	20.0000	100.0000	30.0000	0.0
2/AK1671	0.0	N	50.0000	150.0000	70.0000	20.0000	100.0000	20.0000	0.0
9/AK1202	0.0	N	20.0000	150.0000	50.0000	0.0	100.0000	70.0000	0.0
YAK1201	0.0	N	20.0000	150.0000	50.0000	0.0	100.0000	70.0000	0.0
SAK1200	0.0	N	50.0000	150.0000	70.0000	20.0000	100.0000	100.0000	0.0
6/AK1199	0.0	N	10.0000	150.0000	7.0000	0.0	100.0000	30.0000	0.0
7/AK1203	0.0	N	30.0000	150.0000	70.0000	20.0000	100.0000	30.0000	0.0
8/AK1204	0.0	N	30.0000	150.0000	70.0000	20.0000	100.0000	70.0000	0.0
9/AK1198	0.0	N	20.0000	150.0000	30.0000	0.0	100.0000	20.0000	0.0
7/AK1197	0.0	N	20.0000	150.0000	50.0000	0.0	100.0000	30.0000	0.0
/AK1195	0.0	N	0.0	N	0.0	N	0.0	L	0.0
2/AK1196	0.0	N	30.0000	150.0000	300.0000	0.0	5.0000	10.0000	100.0000
9/AK1194	0.0	N	15.0000	70.0000	70.0000	0.0	10.0000	10.0000	50.0000
8/AK1205	0.0	N	30.0000	150.0000	70.0000	0.0	0.0	10.0000	20.0000
SAK1206	0.0	N	20.0000	150.0000	30.0000	0.0	0.0	10.0000	20.0000
6/AK1207	0.0	N	30.0000	150.0000	70.0000	0.0	0.0	10.0000	30.0000
7/AK1208	0.0	N	20.0000	150.0000	50.0000	0.0	0.0	10.0000	70.0000
8/AK1209	0.0	N	30.0000	150.0000	50.0000	0.0	0.0	10.0000	70.0000
PAK1210	0.0	N	70.0000	150.0000	150.0000	0.0	0.0	10.0000	150.0000
7/AK1211	0.0	N	50.0000	150.0000	300.0000	0.0	0.0	10.0000	150.0000
/AK1212	0.0	N	30.0000	150.0000	150.0000	0.0	0.0	10.0000	100.0000
2/AK1213	0.0	N	70.0000	150.0000	200.0000	0.0	5.0000	10.0000	100.0000
3/AK1219	0.0	N	0.0	N	0.0	L	0.0	L	5.0000
YAK1220	0.0	N	30.0000	70.0000	70.0000	0.0	0.0	10.0000	70.0000
SAK1218	0.0	N	100.0000	150.0000	200.0000	0.0	5.0000	10.0000	150.0000
6/AK1191	0.0	N	30.0000	70.0000	70.0000	0.0	0.0	10.0000	30.0000
7/AK1214	0.0	N	0.0	N	0.0	L	0.0	L	5.0000
8/AK1216	0.0	N	0.0	N	0.0	L	0.0	L	100.0000
AK1215	0.0	N	0.0	N	0.0	L	0.0	L	30.0000
7/AK1217	0.0	N	0.0	N	0.0	L	0.0	L	5.0000
/00/AK1217	0.0	N	0.0	N	0.0	L	0.0	L	30.0000

TABLE 1

SAMPLE	SC PPM	V PPM	W PPM	ZN PPM	Y PPM	AU PPM
5 AK1638	30.0000	300.0000	0.0	300.0000	200.0000	0.0200L
1AK1640	30.0000	0.0	N	300.0000	0.0	0.0200L
5 AK1657	30.0000	0.0	N	300.0000	50.0000	0.0200L
YAK1654	15.0000	100.0000	0.0	200.0000	30.0000	0.0200L
5 AK1653	20.0000	150.0000	0.0	200.0000	30.0000	0.0200L
6 AK1659	15.0000	0.0	N	300.0000	20.0000	0.0200L
7AK1658	15.0000	0.0	N	200.0000	20.0000	0.0200L
3 AK1661	20.0000	0.0	N	300.0000	30.0000	0.0200L
9 AK1660	15.0000	0.0	N	200.0000	20.0000	0.0200L
6 AK1662	20.0000	0.0	N	300.0000	30.0000	0.0200L
1 AK1665	20.0000	0.0	N	200.0000	20.0000	0.0200L
1AK1663	20.0000	0.0	N	150.0000	20.0000	0.0200L
3 AK1664	20.0000	0.0	N	200.0000	30.0000	0.0200L
YAK1666	15.0000	0.0	N	200.0000	15.0000	0.0200L
SAK1667	20.0000	0.0	N	300.0000	20.0000	0.0200L
6 AK1669	20.0000	0.0	N	300.0000	30.0000	0.0200L
7AK1668	20.0000	0.0	N	300.0000	20.0000	0.0200L
1AK1670	20.0000	0.0	N	500.0000	20.0000	0.0200L
3 AK1626	15.0000	0.0	N	100.0000	200.0000	0.0200L
7 AK1625	30.0000	0.0	N	150.0000	30.0000	0.0200L
1 AK1672	30.0000	0.0	N	200.0000	30.0000	0.0200L
2AK1671	20.0000	0.0	N	150.0000	20.0000	0.0200L
3 AK1202	15.0000	0.0	N	100.0000	15.0000	0.0200L
YAK1201	10.0000	0.0	N	0.0	200.0000	10.0000
5 AK1200	20.0000	0.0	N	300.0000	0.0	0.0200L
6 AK1199	10.0000	0.0	N	150.0000	70.0000	0.0200L
7AK1203	15.0000	0.0	N	100.0000	300.0000	0.0200L
8 AK1204	15.0000	0.0	N	100.0000	0.0	0.0200L
YAK1198	15.0000	0.0	N	150.0000	15.0000	0.0200L
8 AK1197	10.0000	0.0	N	0.0	150.0000	15.0000
1 AK1195	0.0	N	0.0	15.0000	30.0000	0.0200L
2AK1196	15.0000	0.0	N	150.0000	15.0000	0.0200L
3 AK1194	7.0000	15.0000	0.0	100.0000	15.0000	0.0200L
YAK1205	15.0000	0.0	N	150.0000	300.0000	0.0200L
5 AK1206	15.0000	0.0	N	200.0000	200.0000	0.0200L
6 AK1207	20.0000	0.0	N	150.0000	300.0000	0.0200L
1AK1208	15.0000	0.0	N	100.0000	200.0000	0.0200L
8 AK1209	15.0000	0.0	N	100.0000	300.0000	0.0200L
9 AK1210	15.0000	0.0	N	100.0000	300.0000	0.0200L
9 AK1211	15.0000	10.0000	0.0	150.0000	200.0000	0.0200L
/AK1212	15.0000	0.0	L	150.0000	200.0000	0.0200L
2AK1213	15.0000	15.0000	0.0	200.0000	200.0000	0.0200L
3 AK1219	0.0	N	0.0	0.0	N	0.0200L
4 AK1220	10.0000	0.0	L	150.0000	0.0	0.0200L
SAK1218	15.0000	15.0000	0.0	200.0000	150.0000	0.0200L
6 AK1191	15.0000	0.0	N	200.0000	150.0000	0.0200L
7AK1214	0.0	L	0.0	0.0	N	0.0200L
8 AK1216	0.0	N	10.0000	0.0	L	0.0200L
9 AK1215	0.0	N	0.0	15.0000	0.0	0.0200L
/0 AK1217	0.0	N	15.0000	0.0	N	0.0200L

TABLE I

SAMPLE	FE PCT	MG PCT	MN PPM	AG PPM	B A PPM	AS PPM	B PPM	BA PPM	BE PPM
1/AK1192	3.0000	0.7000	300.0000	0.0 N	0.0 N	0.0 N	0.0 N	150.0000	2.0000
2/AK1193	7.0000	2.0000	1000.0000	0.0 N	0.0 N	0.0 N	0.0 N	500.0000	0.0
3/AK1228	3.0000	1.5000	300.0000	0.0 N	0.0 N	0.0 N	0.0 N	300.0000	0.0
4/AK1221	3.0000	1.5000	300.0000	0.0 N	0.0 N	0.0 N	0.0 N	20.0000	0.0
SAK1222	15.0000	1.5000	700.0000	1.5000	0.0 N	0.0 N	0.0 N	700.0000	0.0
6/AK1677	15.0000	1.5000	1500.0000	0.3000	200.0000	200.0000	200.0000	500.0000	1.0000
7/AK1678	15.0000	2.0000	1500.0000	0.7000	1.0000	200.0000	100.0000	700.0000	3.0000
SAK1679	15.0000	1.5000	200.0000	0.5000	0.5000	300.0000	300.0000	700.0000	3.0000
9/AK1223	10.0000	1.5000	200.0000	0.5000	0.5000	300.0000	300.0000	700.0000	2.0000
//0/AK1224	3.0000	0.7000	300.0000	0.3000	200.0000	0.0 N	0.0 N	300.0000	0.0
//AK1227	2.0000	0.3000	0.5000	0.1500	500.0000	0.0 N	0.0 N	150.0000	5.0000
2/AK1226	3.0000	0.5000	0.5000	0.1500	700.0000	0.0 N	0.0 N	150.0000	2.0000
3/AK1225	2.0000	0.5000	0.3000	0.1500	300.0000	0.0 N	0.0 N	150.0000	3.0000
4/AK1173	3.0000	1.0000	0.3000	0.3000	700.0000	0.0 N	0.0 N	300.0000	0.0
SAK1175	3.0000	1.5000	0.7000	0.3000	700.0000	0.0 N	0.0 N	300.0000	0.0
6/AK1174	3.0000	2.0000	0.7000	0.3000	500.0000	0.0 N	0.0 N	300.0000	0.0
7/AK1178	7.0000	1.5000	1.0000	0.7000	1000.0000	1.0000	0.0 N	500.0000	0.0
FAK1179	10.0000	1.5000	0.7000	0.7000	1500.0000	0.0 N	0.0 N	700.0000	0.0
9/AK1176	3.0000	1.0000	0.7000	0.3000	500.0000	0.0 N	0.0 N	300.0000	0.0
//D/AK1177	5.0000	1.5000	1.0000	0.5000	1500.0000	0.0 N	0.0 N	700.0000	0.0
/AK1181	10.0000	1.0000	0.3000	0.7000	700.0000	0.0 N	0.0 N	200.0000	0.0
2/AK1180	10.0000	2.0000	1.5000	1.0000	1500.0000	0.0 N	0.0 N	300.0000	0.0
3/AK1182	10.0000	3.0000	1.5000	1.0000	1500.0000	0.0 N	0.0 N	200.0000	0.0
9/AK1183	15.0000	3.0000	1.5000	1.0000	1500.0000	0.0 N	0.0 N	150.0000	300.0000
5/AK1184	10.0000	1.5000	0.7000	0.7000	1500.0000	0.0 N	0.0 N	700.0000	1000.0000
6/AK1185	7.0000	1.5000	0.5000	0.7000	700.0000	0.0 N	0.0 N	150.0000	700.0000
7/AK1186	10.0000	2.0000	0.7000	0.7000	1500.0000	0.0 N	0.0 N	100.0000	1000.0000
5/AK1187	15.0000	1.5000	0.5000	0.7000	3000.0000	0.0 N	0.0 N	100.0000	700.0000
9/AK1190	10.0000	3.0000	1.5000	0.7000	1500.0000	0.0 N	0.0 N	500.0000	700.0000
//5/AK1189	7.0000	2.0000	1.0000	0.7000	1500.0000	0.0 N	0.0 N	200.0000	0.0
/AK1188	7.0000	2.0000	0.7000	0.7000	1500.0000	0.0 N	0.0 N	70.0000	700.0000
2/AK1132	10.0000	2.0000	0.5000	0.7000	1500.0000	0.0 N	0.0 N	70.0000	1500.0000
3/AK1131	10.0000	2.0000	0.5000	0.7000	1500.0000	0.0 N	0.0 N	70.0000	1000.0000
5/AK1130	7.0000	2.0000	0.7000	0.7000	1000.0000	0.0 N	0.0 N	30.0000	700.0000
SAK1133	10.0000	2.0000	0.5000	0.7000	1500.0000	0.0 N	0.0 N	70.0000	1000.0000
6/AK1134	7.0000	1.5000	0.7000	0.5000	1500.0000	0.0 N	0.0 N	150.0000	300.0000
7/AK1135	7.0000	1.5000	0.7000	0.7000	1000.0000	0.0 N	0.0 N	50.0000	700.0000
8/AK1137	10.0000	1.5000	1.5000	0.7000	1500.0000	1.5000	0.0 N	100.0000	1.5000
9/AK1138	10.0000	2.0000	0.7000	0.7000	1500.0000	0.5000	0.0 N	30.0000	700.0000
//4/AK1136	7.0000	1.5000	0.7000	0.5000	700.0000	0.7000	0.0 N	50.0000	1.0000
/AK1165	5.0000	1.5000	1.0000	0.7000	700.0000	0.0 N	0.0 N	20.0000	300.0000
2/AK1166	5.0000	1.5000	1.0000	0.7000	700.0000	0.0 N	0.0 N	20.0000	300.0000
3/AK1167	3.0000	1.0000	0.7000	0.3000	300.0000	0.0 N	0.0 N	20.0000	300.0000
4/AK1168	3.0000	1.0000	1.0000	0.5000	500.0000	0.0 N	0.0 N	200.0000	0.0
SAK1169	3.0000	1.0000	1.0000	0.3000	700.0000	0.5000	0.0 N	70.0000	300.0000
6/AK1170	7.0000	2.0000	1.5000	0.7000	700.0000	0.0 N	0.0 N	10.0000	300.0000
7/AK1171	3.0000	1.5000	1.5000	0.7000	700.0000	0.0 N	0.0 N	0.0	300.0000
2/AK1172	5.0000	1.5000	1.5000	0.7000	1000.0000	1.0000	0.0 N	0.0	300.0000
5/AK1163	7.0000	1.5000	1.5000	0.7000	1000.0000	1.5000	0.0 N	0.0	300.0000
SAK1164	7.0000	1.5000	1.0000	0.3000	700.0000	0.5000	0.0 N	70.0000	0.0

TABLE 1

SAMPLE	SI PPM	CO PPM	CR PPM	LA PPM	MU PPM	NB PPM	NI PPM	PB PPM	SB PPM
1 AKI192	0.0	0.0	10.0000	20.0000	0.0	10.0000	5.0000	30.0000	0.0
2 AKI193	0.0	15.0000	30.0000	30.0000	0.0	10.0000	10.0000	30.0000	0.0
3 AKI128	0.0	20.0000	150.0000	70.0000	0.0	0.0	50.0000	50.0000	0.0
4 AKI221	0.0	20.0000	150.0000	100.0000	0.0	0.0	70.0000	200.0000	0.0
5 AKI222	0.0	70.0000	150.0000	300.0000	0.0	10.0000	100.0000	700.0000	0.0
6 AKI677	0.0	10.0000	150.0000	200.0000	0.0	15.0000	150.0000	70.0000	0.0
7 AKI678	0.0	150.0000	150.0000	200.0000	0.0	15.0000	200.0000	100.0000	0.0
8 AKI679	0.0	100.0000	150.0000	150.0000	0.0	10.0000	100.0000	500.0000	0.0
9 AKI223	0.0	30.0000	150.0000	150.0000	0.0	0.0	150.0000	100.0000	0.0
10 AKI224	0.0	5.0000	100.0000	7.0000	0.0	0.0	0.0	30.0000	0.0
11 AKI227	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12 AKI226	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13 AKI225	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14 AKI173	0.0	15.0000	20.0000	30.0000	0.0	0.0	0.0	30.0000	0.0
15 AKI175	0.0	10.0000	30.0000	30.0000	0.0	0.0	0.0	150.0000	0.0
16 AKI174	0.0	15.0000	70.0000	30.0000	0.0	10.0000	30.0000	50.0000	0.0
17 AKI178	0.0	20.0000	70.0000	15.0000	0.0	10.0000	20.0000	20.0000	0.0
18 AKI179	0.0	30.0000	150.0000	50.0000	0.0	10.0000	70.0000	15.0000	0.0
19 AKI176	0.0	20.0000	50.0000	30.0000	0.0	0.0	0.0	20.0000	0.0
20 AKI177	0.0	20.0000	150.0000	50.0000	0.0	0.0	0.0	15.0000	0.0
21 AKI181	0.0	30.0000	150.0000	70.0000	0.0	10.0000	100.0000	50.0000	0.0
22 AKI182	0.0	30.0000	150.0000	50.0000	0.0	10.0000	100.0000	30.0000	0.0
23 AKI183	0.0	30.0000	200.0000	50.0000	0.0	10.0000	70.0000	30.0000	0.0
24 AKI184	0.0	30.0000	150.0000	70.0000	0.0	10.0000	100.0000	100.0000	0.0
25 AKI185	0.0	30.0000	150.0000	70.0000	0.0	10.0000	70.0000	50.0000	0.0
26 AKI186	0.0	30.0000	150.0000	50.0000	0.0	10.0000	100.0000	150.0000	0.0
27 AKI187	0.0	50.0000	150.0000	70.0000	0.0	10.0000	100.0000	150.0000	0.0
28 AKI190	0.0	50.0000	150.0000	100.0000	0.0	10.0000	100.0000	30.0000	0.0
29 AKI189	0.0	30.0000	150.0000	70.0000	0.0	10.0000	70.0000	70.0000	0.0
30 AKI188	0.0	30.0000	100.0000	70.0000	0.0	10.0000	70.0000	30.0000	0.0
31 AKI132	0.0	20.0000	150.0000	150.0000	0.0	10.0000	150.0000	50.0000	0.0
32 AKI131	0.0	30.0000	150.0000	100.0000	0.0	10.0000	100.0000	30.0000	0.0
33 AKI130	0.0	20.0000	150.0000	30.0000	0.0	10.0000	100.0000	50.0000	0.0
34 AKI133	0.0	20.0000	150.0000	100.0000	0.0	10.0000	100.0000	30.0000	0.0
35 AKI134	0.0	20.0000	100.0000	100.0000	0.0	10.0000	100.0000	50.0000	0.0
36 AKI135	0.0	30.0000	150.0000	70.0000	0.0	10.0000	100.0000	30.0000	0.0
37 AKI137	0.0	30.0000	100.0000	150.0000	0.0	10.0000	150.0000	50.0000	0.0
38 AKI138	0.0	50.0000	150.0000	100.0000	0.0	10.0000	150.0000	20.0000	0.0
39 AKI136	0.0	50.0000	100.0000	150.0000	0.0	10.0000	150.0000	0.0	0.0
40 AKI165	0.0	20.0000	100.0000	15.0000	0.0	10.0000	30.0000	30.0000	0.0
41 AKI166	0.0	20.0000	100.0000	30.0000	0.0	10.0000	0.0	30.0000	0.0
42 AKI167	0.0	15.0000	100.0000	15.0000	0.0	10.0000	0.0	30.0000	0.0
43 AKI168	0.0	10.0000	50.0000	50.0000	0.0	10.0000	15.0000	20.0000	0.0
44 AKI169	0.0	10.0000	30.0000	30.0000	0.0	0.0	0.0	70.0000	0.0
45 AKI170	0.0	30.0000	70.0000	30.0000	0.0	10.0000	15.0000	30.0000	0.0
46 AKI171	0.0	15.0000	30.0000	15.0000	0.0	10.0000	20.0000	30.0000	0.0
47 AKI172	0.0	20.0000	50.0000	20.0000	0.0	10.0000	20.0000	50.0000	0.0
48 AKI163	0.0	15.0000	150.0000	30.0000	0.0	10.0000	10.0000	30.0000	0.0
49 AKI164	0.0	20.0000	100.0000	100.0000	0.0	10.0000	30.0000	30.0000	0.0

TABLE I

SAMPLE	SC PPM	SN PPM	SR PPM	V PPM	Y PPM	ZN PPM	AU PPM
16	0.0 L	0.0 N	0.0 L	30.0000	0.0 N	150.0000	0.0200L
2	15.0000	0.0 N	200.0000	0.0 N	15.0000	0.0 L	100.0000
3	AKI193	15.0000	0.0 N	200.0000	0.0 N	10.0000	0.0200L
4	AKI128	10.0000	0.0 N	150.0000	0.0 N	15.0000	0.0200L
4	AKI121	10.0000	0.0 L	150.0000	0.0 N	15.0000	0.0200L
5	AKI122	15.0000	0.0 N	150.0000	0.0 N	15.0000	0.0200L
6	AKI677	15.0000	0.0 N	150.0000	0.0 N	15.0000	0.0400
7	AKI178	20.0000	0.0 N	200.0000	0.0 N	20.0000	100.0000
8	AKI179	30.0000	0.0 N	300.0000	0.0 N	30.0000	150.0000
9	AKI123	10.0000	0.0 N	200.0000	0.0 N	15.0000	0.0200L
10	AKI124	5.0000	0.0 N	0.0 L	100.0000	0.0 N	200.0000
11	AKI127	0.0 L	0.0 N	0.0 L	20.0000	0.0 N	0.0200L
2	AKI126	0.0 L	15.0000	0.0 L	30.0000	0.0 N	0.0200L
3	AKI125	0.0 L	0.0 N	0.0 L	30.0000	0.0 N	0.0200L
4	AKI173	10.0000	0.0 N	150.0000	0.0 N	10.0000	0.0200L
5	AKI175	10.0000	0.0 N	150.0000	0.0 N	10.0000	0.0200L
6	AKI174	10.0000	0.0 N	150.0000	0.0 N	10.0000	0.0200L
7	AKI178	15.0000	0.0 N	150.0000	0.0 N	20.0000	100.0000
8	AKI179	15.0000	0.0 N	150.0000	0.0 N	15.0000	150.0000
9	AKI176	10.0000	0.0 N	150.0000	0.0 N	10.0000	70.0000
10	AKI177	15.0000	0.0 N	150.0000	0.0 N	15.0000	70.0000
11	AKI181	15.0000	0.0 N	100.0000	0.0 N	15.0000	70.0000
2	AKI180	20.0000	0.0 N	200.0000	0.0 N	20.0000	0.0200L
3	AKI182	20.0000	0.0 N	200.0000	0.0 N	20.0000	200.0000
4	AKI183	20.0000	0.0 N	150.0000	0.0 N	15.0000	0.0200L
5	AKI184	15.0000	0.0 N	150.0000	0.0 N	15.0000	0.0200L
6	AKI185	15.0000	0.0 N	100.0000	0.0 N	15.0000	0.0200L
7	AKI186	15.0000	0.0 N	150.0000	0.0 N	20.0000	100.0000
8	AKI187	15.0000	0.0 N	150.0000	0.0 N	20.0000	200.0000
9	AKI190	20.0000	0.0 N	150.0000	0.0 N	20.0000	0.0200L
10	AKI189	15.0000	0.0 N	200.0000	0.0 N	20.0000	0.0200L
11	AKI188	15.0000	0.0 N	150.0000	0.0 N	15.0000	0.0200L
2	AKI132	15.0000	0.0 N	100.0000	0.0 N	15.0000	0.0200L
3	AKI131	15.0000	0.0 N	100.0000	0.0 N	15.0000	0.0200L
4	AKI130	15.0000	0.0 N	150.0000	0.0 N	15.0000	0.0200L
5	AKI133	15.0000	0.0 N	100.0000	0.0 N	15.0000	0.0200L
6	AKI134	15.0000	0.0 N	100.0000	0.0 N	15.0000	0.0200L
7	AKI135	15.0000	0.0 N	150.0000	0.0 N	15.0000	0.0400L
8	AKI137	15.0000	0.0 N	100.0000	0.0 N	20.0000	70.0000
9	AKI138	15.0000	0.0 N	100.0000	0.0 N	20.0000	70.0000
10	AKI136	15.0000	0.0 N	150.0000	0.0 N	20.0000	0.0200L
11	AKI165	15.0000	0.0 N	150.0000	0.0 N	10.0000	0.0200L
2	AKI166	15.0000	0.0 N	150.0000	0.0 N	15.0000	100.0000
3	AKI167	10.0000	0.0 N	150.0000	0.0 N	10.0000	70.0000
4	AKI168	15.0000	0.0 N	100.0000	0.0 N	10.0000	50.0000
5	AKI169	10.0000	15.0000	150.0000	100.0000	15.0000	0.0200L
6	AKI170	15.0000	0.0 N	150.0000	0.0 N	15.0000	70.0000
7	AKI171	15.0000	0.0 N	150.0000	0.0 N	15.0000	100.0000
8	AKI172	15.0000	0.0 N	200.0000	0.0 N	15.0000	50.0000
9	AKI163	15.0000	0.0 N	150.0000	0.0 N	10.0000	150.0000
10	AKI164	20.0000	0.0 N	150.0000	0.0 N	15.0000	200.0000

W W

TABLE 1

SAMPLE	FE PCT	MG PCT	CA PCT	MN PPM	AS PPM	AG PPM	B PPM	BA PPM	BE PPM
15/AKI161	7.0000	1.0000	0.7000	0.5000	1500.0000	0.0	700.0000	1.0000	1.0000
2/AKI162	7.0000	1.0000	0.7000	0.5000	700.0000	0.0	50.0000	0.0	0.0
3/AKI160	10.0000	0.7000	0.7000	0.5000	1000.0000	0.0	50.0000	0.0	0.0
YAK1159	5.0000	1.0000	0.7000	0.5000	1500.0000	0.0	50.0000	0.0	0.0
SAK1151	5.0000	1.5000	1.0000	0.7000	1000.0000	0.0	30.0000	0.0	0.0
6/AKI152	5.0000	1.0000	0.7000	0.5000	700.0000	0.0	20.0000	0.0	0.0
7/AKI154	10.0000	2.00000	1.0000	0.7000	1500.0000	0.0	70.0000	1.0000	1.0000
8/AKI150	10.0000	2.0000	1.0000	0.7000	1500.0000	0.0	70.0000	1.0000	1.0000
9/AKI158	5.0000	1.0000	0.5000	0.5000	1000.0000	0.0	50.0000	0.0	0.0
1/6 0AKI157	7.0000	1.0000	0.5000	0.7000	1000.0000	0.0	30.0000	0.0	0.0
1/8 AKI153	10.0000	1.0000	0.7000	0.7000	1000.0000	0.0	30.0000	0.0	0.0
ZAK1156	7.0000	1.5000	0.7000	0.7000	1500.0000	0.0	70.0000	1.0000	1.0000
3/AKI155	5.0000	1.0000	0.7000	0.5000	700.0000	0.0	30.0000	0.0	0.0
YAK1156	7.0000	0.7000	0.7000	0.5000	500.0000	0.0	50.0000	0.0	0.0
SAK1148	7.0000	1.0000	0.5000	0.7000	1000.0000	0.0	50.0000	0.0	0.0
6/AKI126	7.0000	1.5000	0.5000	0.5000	1000.0000	0.0	50.0000	0.0	0.0
7/AKI127	5.0000	1.5000	0.7000	0.7000	1000.0000	0.0	50.0000	0.0	0.0
8/AKI125	3.0000	2.0000	1.5000	0.7000	1000.0000	0.0	30.0000	0.0	0.0
9/AKI128	7.0000	2.0000	1.0000	0.5000	1000.0000	0.0	50.0000	0.0	0.0
1/7 0AKI129	7.0000	2.0000	0.7000	0.7000	700.0000	0.0	20.0000	0.0	0.0
7/AKI142	3.0000	1.5000	0.7000	0.3000	700.0000	0.0	50.0000	0.0	0.0
3/AKI141	7.0000	1.5000	0.7000	0.7000	1000.0000	0.0	50.0000	0.0	0.0
5/AKI140	5.0000	1.5000	0.3000	0.5000	1000.0000	0.0	50.0000	0.0	0.0
YAK1139	7.0000	1.5000	0.5000	0.7000	1500.0000	0.0	50.0000	0.0	0.0
SAK1244	3.0000	1.5000	0.7000	0.3000	700.0000	0.0	50.0000	0.0	0.0
6/AKI123	3.0000	1.0000	0.3000	0.3000	1000.0000	0.0	100.0000	0.0	0.0
7/AKI1242	1.0000	0.7000	0.7000	0.3000	200.0000	0.0	30.0000	0.0	0.0
8/AKI1241	5.0000	1.5000	1.0000	0.3000	1000.0000	0.0	50.0000	0.0	0.0
9/AKI1247	1.0000	0.7000	1.0000	0.0700	200.0000	0.0	30.0000	0.0	0.0
1/8 0AKI1246	1.0000	0.7000	0.7000	0.0700	150.0000	0.0	20.0000	0.0	0.0
1/8 /AKI1250	5.0000	1.5000	0.7000	0.7000	1000.0000	0.0	100.0000	0.0	0.0
ZAK1152	3.0000	1.5000	0.7000	0.3000	300.0000	0.0	20.0000	0.0	0.0
3/AKI1251	3.0000	1.5000	1.5000	0.3000	500.0000	0.0	200.0000	0.0	0.0
YAK1153	5.0000	1.5000	0.5000	0.5000	1000.0000	0.0	50.0000	0.0	0.0
SAK1154	3.0000	1.5000	0.7000	0.3000	700.0000	0.0	30.0000	0.0	0.0
6/AKI1255	5.0000	1.0000	0.5000	0.5000	1.0000	0.0	0.0	0.0	0.0
7/AKI1248	5.0000	1.5000	0.5000	0.7000	1000.0000	0.0	50.0000	0.0	0.0
8/AKI1249	10.0000	1.5000	0.3000	0.7000	1500.0000	0.0	200.0000	0.0	0.0
9/AKI1245	3.0000	1.0000	0.7000	0.3000	500.0000	0.0	30.0000	0.0	0.0
1/1 0AKI1680	10.0000	1.5000	2.0000	0.7000	1000.0000	0.0	200.0000	0.0	0.0
1/8 /AKI1240	2.0000	1.0000	0.5000	0.3000	300.0000	0.0	70.0000	0.0	0.0
ZAK1133	10.0000	2.0000	0.5000	0.7000	1000.0000	0.0	50.0000	0.0	0.0
3/AKI1232	5.0000	1.5000	0.3000	0.3000	1500.0000	0.0	50.0000	0.0	0.0
4/AKI1239	5.0000	2.0000	1.5000	0.5000	1000.0000	0.0	20.0000	0.0	0.0
5/AKI1238	5.0000	1.5000	0.5000	0.7000	700.0000	0.0	50.0000	0.0	0.0
6/AKI1234	7.0000	1.0000	0.7000	0.3000	1500.0000	0.0	50.0000	0.0	0.0
7/AKI1235	7.0000	1.0000	0.1500	0.7000	700.0000	0.0	50.0000	0.0	0.0
8/AKI1236	5.0000	1.0000	0.3000	0.5000	1000.0000	0.0	30.0000	0.0	0.0
9/AKI1237	5.0000	1.0000	0.1500	0.7000	700.0000	0.0	30.0000	0.0	0.0
10/0AKI1231	5.0000	1.5000	0.2000	0.5000	1500.0000	0.0	70.0000	0.0	0.0

TABLE 1

SAMPLE	RI PPM	CO PPM	CR PPM	LA PPM	MD PPM	NB PPM	NI PPM	PB PPM	SB PPM
1/6'AK1161	0.0	N	70.0000	0.0	0.0	10.0000	100.0000	30.0000	0.0
ZAK1162	0.0	N	50.0000	0.0	0.0	10.0000	70.0000	20.0000	0.0
2AK1160	0.0	N	30.0000	0.0	0.0	10.0000	70.0000	30.0000	0.0
YAK1159	0.0	N	30.0000	0.0	0.0	10.0000	100.0000	30.0000	0.0
SAK1151	0.0	N	20.0000	0.0	0.0	10.0000	70.0000	30.0000	0.0
6AK1152	0.0	N	15.0000	0.0	0.0	10.0000	50.0000	30.0000	0.0
7AK1149	0.0	N	30.0000	0.0	0.0	10.0000	100.0000	70.0000	0.0
PAK1150	0.0	N	30.0000	0.0	0.0	10.0000	100.0000	30.0000	0.0
PAK1158	0.0	N	30.0000	0.0	0.0	10.0000	100.0000	30.0000	0.0
6AK1157	0.0	N	30.0000	0.0	0.0	10.0000	70.0000	20.0000	0.0
'AK1153	0.0	N	15.0000	0.0	0.0	0.0	70.0000	30.0000	0.0
2AK1154	0.0	N	30.0000	0.0	0.0	10.0000	100.0000	70.0000	0.0
SAK1155	0.0	N	15.0000	0.0	0.0	10.0000	30.0000	20.0000	0.0
YAK1156	0.0	N	20.0000	0.0	0.0	10.0000	30.0000	20.0000	0.0
SAK1148	0.0	N	30.0000	0.0	0.0	10.0000	70.0000	15.0000	0.0
6AK1126	0.0	N	15.0000	0.0	0.0	10.0000	70.0000	10.0000	0.0
7AK1127	0.0	N	30.0000	0.0	0.0	10.0000	100.0000	20.0000	0.0
SAK1125	0.0	N	15.0000	0.0	0.0	10.0000	30.0000	20.0000	0.0
7AK1128	0.0	N	15.0000	0.0	0.0	10.0000	30.0000	20.0000	0.0
7/6AK1129	0.0	N	20.0000	0.0	0.0	10.0000	70.0000	30.0000	0.0
'AK1142	0.0	N	20.0000	0.0	0.0	0.0	50.0000	30.0000	0.0
AK1141	0.0	N	30.0000	0.0	0.0	10.0000	100.0000	30.0000	0.0
2AK1140	0.0	N	20.0000	0.0	0.0	10.0000	100.0000	30.0000	0.0
YAK1139	0.0	N	30.0000	0.0	0.0	10.0000	100.0000	30.0000	0.0
SAK1244	0.0	N	30.0000	0.0	0.0	10.0000	70.0000	70.0000	0.0
6AK1243	0.0	N	30.0000	0.0	0.0	10.0000	70.0000	50.0000	0.0
7AK1242	0.0	N	0.0	L	15.0000	10.0000	150.0000	30.0000	0.0
PAK1241	0.0	N	15.0000	0.0	0.0	10.0000	100.0000	30.0000	0.0
7AK1247	0.0	N	0.0	L	30.0000	5.0000	0.0	10.0000	30.0000
7/6AK1246	0.0	N	0.0	L	30.0000	5.0000	0.0	15.0000	30.0000
AK1250	0.0	N	30.0000	0.0	0.0	10.0000	70.0000	20.0000	0.0
ZAK1252	0.0	N	15.0000	0.0	0.0	0.0	5.0000	10.0000	0.0
3AK1251	0.0	N	10.0000	0.0	0.0	10.0000	70.0000	50.0000	0.0
YAK1253	0.0	N	20.0000	0.0	0.0	10.0000	70.0000	30.0000	0.0
SAK1254	0.0	N	5.0000	0.0	0.0	10.0000	70.0000	30.0000	0.0
6AK1255	0.0	N	20.0000	0.0	0.0	10.0000	70.0000	70.0000	0.0
7AK1248	0.0	N	30.0000	0.0	0.0	10.0000	70.0000	10.0000	0.0
8AK1249	0.0	N	70.0000	0.0	0.0	150.0000	50.0000	10.0000	0.0
7AK1245	0.0	N	15.0000	0.0	0.0	0.0	5.0000	50.0000	0.0
7/6AK1680	0.0	N	30.0000	0.0	0.0	10.0000	70.0000	70.0000	0.0
AK1240	0.0	N	10.0000	0.0	0.0	15.0000	0.0	15.0000	0.0
2AK1233	0.0	N	30.0000	0.0	0.0	300.0000	70.0000	10.0000	150.0000
3AK1232	0.0	N	70.0000	0.0	0.0	200.0000	50.0000	10.0000	150.0000
YAK1239	0.0	N	30.0000	0.0	0.0	20.0000	0.0	30.0000	30.0000
SAK1238	0.0	N	20.0000	0.0	0.0	10.0000	70.0000	70.0000	30.0000
6AK1234	0.0	N	30.0000	0.0	0.0	10.0000	70.0000	10.0000	30.0000
7AK1235	0.0	N	30.0000	0.0	0.0	0.0	0.0	70.0000	30.0000
7AK1236	0.0	N	30.0000	0.0	0.0	10.0000	70.0000	70.0000	20.0000
7AK1237	0.0	N	20.0000	0.0	0.0	10.0000	50.0000	20.0000	30.0000
7/6AK1231	0.0	N	30.0000	0.0	0.0	150.0000	70.0000	10.0000	150.0000

TABLE 1

SAMPLE	SC PPM	SN PPM	SR PPM	W PPM	Y PPM	ZN PPM	AU PPM
15' AKI161	15.0000	0.0	200.0000	0.0	15.0000	200.0000	0.0200L
2 AKI162	15.0000	0.0	100.0000	0.0	15.0000	0.0	0.0200L
3 AKI160	15.0000	0.0	150.0000	0.0	15.0000	200.0000	100.0000
4 AKI159	15.0000	0.0	150.0000	0.0	15.0000	200.0000	100.0000
5 AKI151	15.0000	0.0	150.0000	0.0	15.0000	200.0000	70.0000
6 AKI152	10.0000	0.0	150.0000	0.0	10.0000	0.0	0.0200L
7 AKI149	20.0000	0.0	200.0000	0.0	20.0000	200.0000	70.0000
8 AKI150	15.0000	0.0	200.0000	0.0	20.0000	200.0000	100.0000
9 AKI158	15.0000	0.0	100.0000	0.0	10.0000	0.0	0.0200L
10 AKI157	15.0000	0.0	100.0000	0.0	15.0000	0.0	0.0200L
11 AKI153	15.0000	0.0	150.0000	0.0	15.0000	0.0	0.0200L
12 AKI154	15.0000	0.0	150.0000	0.0	10.0000	10.0000	0.0200L
13 AKI155	15.0000	0.0	100.0000	0.0	10.0000	10.0000	0.0400L
14 AKI156	15.0000	0.0	150.0000	0.0	15.0000	0.0	0.0600
15 AKI148	15.0000	0.0	300.0000	0.0	100.0000	0.0	0.0200L
16 AKI126	10.0000	0.0	150.0000	0.0	10.0000	15.0000	0.0200L
17 AKI127	15.0000	0.0	100.0000	0.0	15.0000	0.0	0.0200L
18 AKI125	10.0000	0.0	300.0000	0.0	100.0000	0.0	0.0200L
19 AKI128	15.0000	0.0	200.0000	0.0	15.0000	200.0000	70.0000
20 AKI129	15.0000	0.0	150.0000	0.0	15.0000	0.0	0.0200L
21 AKI142	10.0000	0.0	150.0000	0.0	10.0000	10.0000	0.0200L
22 AKI141	15.0000	0.0	100.0000	0.0	20.0000	0.0	0.0200L
23 AKI140	15.0000	0.0	150.0000	0.0	15.0000	200.0000	70.0000
24 AKI139	15.0000	0.0	100.0000	0.0	15.0000	200.0000	70.0000
25 AKI124	10.0000	0.0	150.0000	0.0	10.0000	0.0	0.0200L
26 AKI123	10.0000	0.0	100.0000	0.0	10.0000	50.0000	100.0000
27 AKI1242	0.0	0.0	150.0000	0.0	10.0000	0.0	0.0200L
28 AKI1241	15.0000	0.0	200.0000	0.0	15.0000	300.0000	100.0000
29 AKI1247	0.0	0.0	150.0000	0.0	10.0000	0.0	0.0200L
30 AKI1246	0.0	0.0	150.0000	0.0	10.0000	0.0	0.0200L
31 AKI1250	15.0000	0.0	0.0	0.0	15.0000	0.0	0.0200L
32 AKI1252	15.0000	0.0	0.0	0.0	10.0000	0.0	0.0200L
33 AKI1251	15.0000	0.0	200.0000	0.0	100.0000	0.0	0.0200L
34 AKI1253	15.0000	0.0	0.0	0.0	15.0000	0.0	0.0200L
35 AKI1254	10.0000	0.0	0.0	0.0	10.0000	0.0	0.0200L
36 AKI1255	15.0000	0.0	100.0000	0.0	15.0000	0.0	0.1000
37 AKI1248	15.0000	0.0	0.0	0.0	10.0000	0.0	0.0400
38 AKI1251	15.0000	0.0	200.0000	0.0	15.0000	0.0	0.0600
39 AKI1252	7.00000	0.0	0.0	0.0	10.0000	0.0	0.0400
40 AKI1680	30.0000	0.0	300.0000	0.0	20.0000	0.0	0.0200L
41 AKI1240	15.0000	0.0	150.0000	0.0	10.0000	0.0	0.0200L
42 AKI1233	15.00000	0.0	100.0000	0.0	15.0000	300.0000	300.0000
43 AKI1232	15.0000	0.0	100.0000	0.0	15.0000	200.0000	200.0000
44 AKI1239	15.0000	0.0	300.0000	0.0	15.0000	0.0	0.0200L
45 AKI1238	15.0000	0.0	150.0000	0.0	15.0000	0.0	0.1000
46 AKI1234	15.0000	0.0	150.0000	0.0	15.0000	200.0000	150.0000
47 AKI1235	15.00000	0.0	100.0000	0.0	15.0000	200.0000	70.0000
48 AKI1236	15.0000	0.0	100.0000	0.0	15.0000	200.0000	70.0000
49 AKI1237	15.0000	0.0	100.0000	0.0	15.0000	0.0	0.0200L
50 AKI1231	15.00000	0.0	100.0000	0.0	200.0000	300.0000	100.0000

TABLE 1

SAMPLE	FE PCT	CA PCT	Ti PCT	MN PPM	AS PPM	AG PPM	AS PPM	BA PPM	BE PPM
20/AKI129	3.0000	0.1500	0.5000	700.0000	20.0000	700.0000	0.0	N	0.0
2AKI1262	5.0000	1.5000	2.0000	1500.0000	50.0000	700.0000	0.0	L	0.0
3AKI1261	5.0000	0.7000	0.1500	1000.0000	0.0	30.0000	700.0000	0.0	L
3AKI1259	5.0000	1.0000	0.3000	5000.0000	0.0	30.0000	700.0000	0.0	L
5AKI1256	3.0000	0.7000	0.3000	700.0000	0.0	15.0000	500.0000	0.0	N
6AKI1257	10.0000	1.0000	0.3000	1500.0000	0.0	30.0000	700.0000	0.0	L
7AKI1260	10.0000	1.0000	0.5000	1500.0000	0.0	30.0000	1000.0000	0.0	L
8AKI1258	10.0000	1.0000	0.3000	1500.0000	0.0	50.0000	1500.0000	1.0000	L
9AKI1263	7.0000	1.0000	0.7000	1000.0000	0.0	30.0000	700.0000	0.0	L
10/AKI1264	5.0000	0.7000	1.5000	5000.0000	0.0	70.0000	700.0000	0.0	L
1/AKA428	15.0000	1.0000	0.7000	1.0000	0.0	50.0000	1500.0000	1.0000	L
2AKA429	7.0000	0.7000	0.1500	1500.0000	0.0	0.0	50.0000	1000.0000	0.0
3AKA431	7.0000	3.0000	1.5000	1000.0000	0.0	0.0	20.0000	1000.0000	0.0
YAKA430	7.0000	3.0000	1.5000	5000.0000	0.0	0.0	30.0000	1000.0000	0.0
5AKA433	15.0000	7.0000	1.5000	1000.0000	0.0	0.0	15.0000	300.0000	0.0
6AKA923	5.0000	3.0000	1.0000	1500.0000	0.0	50.0000	500.0000	700.0000	1.0000
7AKI1431	15.0000	5.0000	2.0000	1500.0000	0.0	0.0	20.0000	300.0000	1.0000
8AKA432	10.0000	1.5000	1.5000	1000.0000	0.0	500.0000	1000.0000	700.0000	1.0000
9AKA922	3.0000	1.0000	0.7000	300.0000	0.0	30.0000	300.0000	500.0000	N
20/AKI1432	10.0000	2.0000	1.5000	1000.0000	0.0	1000.0000	700.0000	700.0000	1.5000
1/AKI1433	10.0000	2.0000	1.0000	1500.0000	0.0	500.0000	700.0000	700.0000	1.5000
2AKI1453	10.0000	1.5000	1.5000	1000.0000	0.0	200.0000	200.0000	700.0000	1.5000
3AKI1452	10.0000	1.5000	1.5000	1000.0000	0.0	300.0000	300.0000	700.0000	1.5000
YAKI1451	15.0000	1.5000	1.5000	700.0000	0.0	0.0	300.0000	700.0000	1.5000
5AKI1450	7.0000	2.0000	1.0000	1000.0000	0.0	0.0	150.0000	500.0000	1.5000
6AKA424	15.0000	1.5000	0.5000	5000.0000	0.0	100.0000	100.0000	1500.0000	1.0000
7AKA423	7.0000	1.5000	1.5000	1000.0000	0.0	0.0	30.0000	700.0000	0.0
8AKA422	10.0000	2.0000	0.7000	2000.0000	0.0	0.0	50.0000	1000.0000	1.0000
9AKA434	15.0000	2.0000	0.7000	1500.0000	0.0	0.0	70.0000	700.0000	1.0000
23/AKA435	3.0000	1.0000	1.5000	3000.0000	0.0	0.0	10.0000	300.0000	0.0
1/AKA436	10.0000	1.0000	1.5000	1500.0000	0.0	0.0	100.0000	700.0000	1.0000
2AKA437	15.0000	1.5000	2.0000	1500.0000	0.0	0.0	20.0000	700.0000	0.0
3AKA421	10.0000	1.5000	0.7000	2000.0000	0.0	0.0	30.0000	1500.0000	1.0000
YAKA420	10.0000	1.5000	0.7000	1500.0000	0.0	0.0	30.0000	700.0000	1.0000
5AKA425	15.0000	2.0000	3.0000	1500.0000	0.0	0.0	15.0000	700.0000	0.0
6AKA419	7.0000	1.5000	2.0000	1500.0000	0.0	0.0	10.0000	700.0000	0.0
7AKA426	15.0000	1.0000	0.3000	10000.0000	0.0	0.0	20.0000	1500.0000	1.0000
8AKA427	10.0000	1.0000	0.7000	1500.0000	0.0	0.0	30.0000	700.0000	1.0000
9AKA418	5.0000	1.0000	0.2000	15000.0000	0.0	0.0	30.0000	700.0000	1.0000
5/6AKA417	5.0000	1.0000	0.3000	1000.0000	0.0	0.0	30.0000	1000.0000	0.0
1/AKA414	10.0000	1.0000	0.5000	1500.0000	0.0	0.0	50.0000	1000.0000	1.0000
2AKA416	5.0000	1.0000	0.7000	1500.0000	0.0	0.0	30.0000	700.0000	1.0000
3AKA415	10.0000	1.0000	0.7000	1500.0000	0.0	0.0	30.0000	700.0000	1.0000
YAKA412	7.0000	1.0000	0.2000	15000.0000	0.0	0.0	30.0000	700.0000	1.0000
5AKA092	5.0000	1.0000	0.5000	1000.0000	0.0	0.0	50.0000	1000.0000	0.0
6AKA093	7.0000	1.5000	0.7000	1500.0000	0.0	0.0	50.0000	700.0000	0.0
7AKA363	5.0000	0.7000	0.7000	0.50000	0.0	0.0	50.0000	700.0000	0.0
8AKA095	7.0000	1.0000	0.7000	1500.0000	0.0	0.0	70.0000	1000.0000	1.0000
9AKA362	5.0000	0.7000	0.5000	1000.0000	0.0	0.0	50.0000	70.0000	0.0
23/0AKA094	7.0000	1.0000	0.5000	1500.0000	0.0	0.0	70.0000	1000.0000	1.0000

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TABLE 1

SAMPLE	BI PPM	CO PPM	CR PPM	CU PPM	LA PPM	MO PPM	NB PPM	NI PPM	PB PPM	SB PPM
10, AKI129	0.0	N	20.0000	150.0000	30.0000	30.0000	0.0	L	0.0	0.0
2, AKI162	0.0	N	15.0000	50.0000	50.0000	0.0	N	N	15.0000	15.0000
3, AKI1261	0.0	N	20.0000	150.0000	50.0000	30.0000	0.0	L	10.0000	10.0000
4, AKI1259	0.0	N	20.0000	100.0000	70.0000	70.0000	0.0	N	70.0000	20.0000
5, SAKI1256	0.0	N	15.0000	100.0000	50.0000	30.0000	0.0	N	10.0000	0.0
6, AKI1257	0.0	N	20.0000	200.0000	70.0000	50.0000	0.0	L	100.0000	15.0000
7, AKI1260	0.0	N	30.0000	150.0000	70.0000	30.0000	0.0	N	100.0000	20.0000
8, SAKI1258	0.0	N	20.0000	150.0000	70.0000	30.0000	0.0	N	100.0000	30.0000
9, AKI1263	0.0	N	15.0000	150.0000	50.0000	0.0	N	N	70.0000	15.0000
10, AKI1264	0.0	N	15.0000	150.0000	50.0000	30.0000	0.0	N	10.0000	0.0
11, AKA428	0.0	N	30.0000	150.0000	70.0000	70.0000	0.0	L	100.0000	30.0000
12, LAKA429	0.0	N	20.0000	150.0000	70.0000	30.0000	0.0	L	100.0000	30.0000
13, AKA431	0.0	N	20.0000	300.0000	20.0000	70.0000	0.0	L	0.0	20.0000
14, YAKA430	0.0	N	20.0000	300.0000	30.0000	0.0	N	N	70.0000	20.0000
15, SAKA433	0.0	N	70.0000	700.0000	70.0000	70.0000	0.0	N	100.0000	0.0
16, LAKA923	0.0	N	30.0000	300.0000	50.0000	50.0000	0.0	L	10.0000	15.0000
17, TAKI1431	0.0	N	70.0000	700.0000	100.0000	30.0000	0.0	L	100.0000	15.0000
18, TAKA432	0.0	N	20.0000	300.0000	30.0000	20.0000	0.0	L	10.0000	0.0
19, TAKA922	0.0	N	20.0000	200.0000	30.0000	0.0	N	N	100.0000	15.0000
20, OAKI1432	0.0	N	50.0000	300.0000	50.0000	50.0000	0.0	N	100.0000	0.0
21, IAKI1433	0.0	N	50.0000	300.0000	50.0000	50.0000	0.0	L	10.0000	15.0000
22, ZAKI1453	0.0	N	50.0000	300.0000	30.0000	30.0000	0.0	L	100.0000	15.0000
23, JAKI1452	0.0	N	50.0000	300.0000	30.0000	30.0000	0.0	L	100.0000	15.0000
24, YAKI1451	0.0	N	50.0000	300.0000	10.0000	10.0000	0.0	L	100.0000	10.0000
25, SAKI1450	0.0	N	30.0000	200.0000	5.00000	0.0	N	N	50.0000	10.0000
26, LAKA424	0.0	N	70.0000	150.0000	150.0000	30.0000	5.00000	L	10.0000	50.0000
27, TAKA423	0.0	N	50.0000	200.0000	70.0000	20.0000	0.0	L	10.0000	30.0000
28, SAKA422	0.0	N	30.0000	150.0000	70.0000	20.0000	0.0	N	10.0000	30.0000
29, YAKA434	0.0	N	30.0000	150.0000	70.0000	20.0000	0.0	N	10.0000	30.0000
30, SAKA435	0.0	N	0.0	30.0000	0.0	0.0	N	N	0.0	10.0000
31, IAKA436	0.0	N	70.0000	150.0000	50.0000	50.0000	0.0	L	10.0000	20.0000
32, ZAKA437	0.0	N	20.0000	150.0000	50.0000	20.0000	5.00000	L	10.0000	15.0000
33, JAKA421	0.0	N	30.0000	200.0000	70.0000	20.0000	0.0	N	10.0000	15.0000
34, YAKA420	0.0	N	20.0000	100.0000	70.0000	15.0000	0.0	N	70.0000	30.0000
35, SAKA425	0.0	N	30.0000	70.0000	70.0000	0.0	N	N	30.0000	10.0000
36, LAKA419	0.0	N	15.0000	30.0000	30.0000	0.0	N	N	10.0000	15.0000
37, TAKA426	0.0	N	30.0000	150.0000	70.0000	20.0000	0.0	L	10.0000	30.0000
38, SAKA427	0.0	N	30.0000	150.0000	70.0000	20.0000	0.0	N	10.0000	30.0000
39, YAKA418	0.0	N	10.0000	30.0000	15.0000	0.0	N	N	15.0000	10.0000
40, SAKA417	0.0	N	20.0000	150.0000	50.00000	30.0000	0.0	N	100.0000	15.0000
41, IAKA414	0.0	N	30.0000	150.0000	150.0000	50.0000	30.0000	0.0	L	10.0000
42, AKA416	0.0	N	15.0000	100.0000	50.00000	50.0000	0.0	N	10.0000	15.0000
43, SAKA415	0.0	N	30.0000	100.0000	70.00000	30.0000	0.0	N	10.0000	30.0000
44, YAKA412	0.0	N	30.0000	150.0000	70.00000	0.0	N	N	10.0000	30.0000
45, SAKA092	0.0	N	15.0000	150.0000	30.00000	0.0	N	N	50.00000	0.0
46, SAKA093	0.0	N	15.0000	150.0000	50.00000	0.0	N	N	70.00000	0.0
47, YAKA363	0.0	N	15.0000	100.0000	30.00000	0.0	N	N	20.00000	0.0
48, SAKA095	0.0	N	15.0000	100.0000	50.00000	0.0	N	N	30.00000	0.0
49, YAKA362	0.0	N	15.0000	150.0000	30.00000	0.0	N	N	70.00000	0.0
50, SAKA094	0.0	N	20.0000	200.0000	70.00000	0.0	N	N	100.00000	0.0

TABLE 1

SAMPLE	SC PPM	SR PPM	SN PPM	V PPM	Y PPM	ZN PPM	ZR PPM	AU PPM
20/AKI129	15.0000	150.0000	0.0	150.0000	15.0000	0.0	150.0000	0.0200L
21/AKI1262	15.0000	0.0	200.0000	0.0	100.0000	0.0	100.0000	0.1000L
22/AKI1261	10.0000	0.0	100.0000	0.0	100.0000	0.0	100.0000	0.0200L
23/AKI1259	10.0000	0.0	100.0000	0.0	150.0000	0.0	200.0000	0.0200L
24/AKI1256	10.0000	0.0	100.0000	0.0	10.0000	0.0	100.0000	0.0200L
25/AKI1257	15.0000	0.0	100.0000	0.0	15.0000	0.0	200.0000	0.0200L
26/AKI1260	15.0000	0.0	150.0000	0.0	200.0000	0.0	300.0000	0.0200L
27/AKI1258	15.0000	0.0	150.0000	0.0	200.0000	0.0	300.0000	0.0200L
28/AKI1263	15.0000	0.0	150.0000	0.0	200.0000	0.0	300.0000	0.0200L
29/AKI1264	15.0000	0.0	150.0000	0.0	200.0000	0.0	300.0000	0.0200L
30/AKA428	20.0000	0.0	200.0000	0.0	300.0000	0.0	200.0000	1.0000
31/AKA429	15.0000	0.0	150.0000	0.0	200.0000	0.0	150.0000	0.0200L
32/AKA431	15.0000	0.0	200.0000	0.0	150.0000	0.0	150.0000	0.0200L
33/YAKA430	15.0000	0.0	200.0000	0.0	150.0000	0.0	200.0000	0.1000
34/SAKA433	20.0000	0.0	200.0000	0.0	200.0000	0.0	200.0000	0.7000
35/6AKA923	20.0000	0.0	200.0000	0.0	200.0000	0.0	200.0000	0.4000
36/7AKI431	30.0000	0.0	150.0000	0.0	300.0000	0.0	200.0000	0.0200L
37/SAKA432	30.0000	0.0	200.0000	0.0	200.0000	0.0	300.0000	0.2000
38/9AKA922	15.0000	0.0	100.0000	0.0	150.0000	0.0	200.0000	0.1000
39/10/AKI1432	20.0000	0.0	200.0000	0.0	200.0000	0.0	200.0000	0.0400
40/1/AKI433	15.0000	0.0	150.0000	0.0	200.0000	0.0	100.0000	0.0200L
41/2AKI453	15.0000	0.0	200.0000	0.0	200.0000	0.0	200.0000	0.0200L
42/3AKI452	20.0000	0.0	300.0000	0.0	200.0000	0.0	150.0000	0.0200L
43/YAKI451	20.0000	0.0	300.0000	0.0	200.0000	0.0	200.0000	0.0200L
44/5AKI450	15.0000	0.0	200.0000	0.0	150.0000	0.0	70.0000	0.0200L
45/6AKA424	30.0000	0.0	100.0000	0.0	300.0000	0.0	300.0000	0.0200L
46/7AKA423	15.0000	0.0	200.0000	0.0	100.0000	0.0	150.0000	0.0200L
47/8AKA422	20.0000	0.0	150.0000	0.0	300.0000	0.0	300.0000	0.0200L
48/7AKA434	7.0000	0.0	150.0000	0.0	200.0000	0.0	200.0000	0.0200L
49/230/AKA435	15.0000	0.0	300.0000	0.0	30.0000	0.0	100.0000	0.0200L
50/1/AKA436	20.0000	0.0	200.0000	0.0	200.0000	0.0	500.0000	0.0200L
51/2AKA437	20.0000	0.0	700.0000	0.0	30.0000	0.0	150.0000	0.0000
52/3AKA421	20.0000	0.0	150.0000	0.0	200.0000	0.0	200.0000	0.0200L
53/YAKA420	15.0000	0.0	200.0000	0.0	15.0000	0.0	70.0000	0.0200L
54/SAKA425	30.0000	0.0	300.0000	0.0	30.0000	0.0	300.0000	0.0200L
55/6AKA419	15.0000	0.0	300.0000	0.0	200.0000	0.0	20.0000	0.0200L
56/7AKA426	20.0000	0.0	100.0000	0.0	200.0000	0.0	20.0000	0.0400
57/8AKA427	15.0000	0.0	150.0000	0.0	200.0000	0.0	150.0000	0.0200L
58/9AKA418	10.0000	0.0	300.0000	0.0	100.0000	0.0	50.0000	0.1000
59/10/AKA417	15.0000	0.0	150.0000	0.0	200.0000	0.0	150.0000	0.1000
60/1/AKA414	15.0000	0.0	200.0000	0.0	300.0000	0.0	150.0000	0.0200L
61/2AKA416	15.0000	0.0	200.0000	0.0	200.0000	0.0	100.0000	0.0200L
62/3AKA415	15.0000	0.0	200.0000	0.0	300.0000	0.0	100.0000	0.0200L
63/YAKA412	15.0000	0.0	100.0000	0.0	200.0000	0.0	70.0000	0.0200L
64/GAKA092	10.0000	0.0	100.0000	0.0	150.0000	0.0	200.0000	0.0200L
65/6AKA093	15.0000	0.0	150.0000	0.0	150.0000	0.0	300.0000	0.0200L
66/7AKA363	15.0000	0.0	150.0000	0.0	150.0000	0.0	150.0000	0.0200L
67/YAKA095	15.0000	0.0	150.0000	0.0	150.0000	0.0	300.0000	0.2000
68/7AKA362	10.0000	0.0	100.0000	0.0	150.0000	0.0	70.0000	0.0200L
69/7AKA094	15.0000	0.0	100.0000	0.0	150.0000	0.0	200.0000	0.0200L

TABLE 1

SAMPLE	FE PCT	CA PCT	MN PCT	Tl PCT	BA PPM	BE PPM
25 / AKA360	5.0000	0.5000	1000.0000	0.5000	700.0000	1.0000
1 AKA359	5.0000	0.7000	0.5000	0.7000	1000.0000	50.0000
3 AKA358	5.0000	0.7000	0.2000	0.5000	700.0000	30.0000
5 AKA356	5.0000	0.7000	0.5000	0.7000	700.0000	50.0000
7 AKA357	7.0000	1.0000	0.5000	0.7000	1000.0000	50.0000
6 AKA096	10.0000	1.5000	1.5000	0.7000	1500.0000	30.0000
1 AKA097	7.0000	1.0000	0.7000	0.3000	1000.0000	15.0000
2 AKA100	3.0000	1.0000	0.7000	0.3000	1000.0000	0.0
4 AKA098	5.0000	1.0000	0.7000	0.5000	1000.0000	0.0
6 AKA121	15.0000	1.0000	0.5000	0.5000	700.0000	2000.0000
1 AKA125	7.0000	1.5000	0.30000	0.7000	1000.0000	1500.0000
3 AKA126	7.0000	1.5000	0.5000	0.7000	1000.0000	200.0000
3 AKA129	15.0000	1.0000	0.5000	0.7000	700.0000	3000.0000
1 AKA1270	10.0000	1.5000	0.1500	0.7000	300.0000	0.0
7 AKA918	5.0000	1.0000	0.7000	0.2000	700.0000	200.0000
5 AKA919	10.0000	1.0000	0.30000	0.7000	1000.0000	500.0000
4 AKA920	15.0000	1.0000	0.1500	0.7000	1000.0000	0.0
3 AKA921	7.0000	0.7000	0.1500	0.5000	700.0000	700.0000
9 AKA1267	10.0000	1.0000	0.7000	0.7000	1000.0000	0.0
27 0 AKA1268	10.0000	1.0000	0.7000	0.7000	700.0000	0.0
1 AKA407	7.0000	0.7000	0.7000	0.5000	1500.0000	1500.0000
2 AKA406	10.0000	1.0000	0.7000	0.7000	1500.0000	2.0000
3 AKA408	10.0000	1.5000	0.5000	1.0000	1500.0000	50.0000
4 AKA405	10.0000	1.5000	1.5000	0.7000	1500.0000	1.5000
5 AKA409	7.0000	1.0000	0.2000	0.7000	1500.0000	1.0000
6 AKA410	10.0000	1.5000	1.0000	0.7000	1500.0000	1.0000
7 AKA404	15.0000	1.0000	0.7000	0.7000	1500.0000	0.5000
9 AKA413	5.0000	1.0000	0.7000	0.5000	1000.0000	0.0
9 AKA411	5.0000	1.0000	0.1500	0.7000	1000.0000	0.0
5 AKA403	5.0000	1.0000	0.3000	0.5000	1500.0000	0.0
1 AKA402	10.0000	1.5000	0.7000	1.0000	2000.0000	0.7000
1 AKA091	10.0000	1.0000	0.3000	0.7000	700.0000	0.0
3 AKA090	7.0000	1.0000	0.2000	0.7000	1000.0000	0.7000
9 AKA089	5.0000	0.7000	0.1500	0.3000	500.0000	0.0
5 AKA519	7.0000	0.7000	0.2000	0.5000	700.0000	0.0
6 AKA088	10.0000	1.0000	0.3000	0.7000	1000.0000	0.5000
7 AKA518	3.0000	0.7000	0.2000	0.3000	700.0000	0.5000
2 AKA516	3.0000	0.7000	0.3000	0.3000	700.0000	0.5000
9 AKA087	7.0000	0.7000	0.3000	0.7000	1000.0000	0.0
27 0 AKA515	3.0000	0.7000	0.2000	0.3000	700.0000	0.5000
5 AKA084	5.0000	0.7000	0.2000	0.7000	700.0000	0.0
6 AKA085	7.0000	0.7000	0.2000	0.7000	700.0000	0.0
7 AKA511	3.0000	0.7000	0.1500	0.5000	700.0000	0.7000
2 AKA513	3.0000	0.7000	0.1500	0.5000	700.0000	0.0
9 AKA512	3.0000	0.7000	0.1500	0.5000	700.0000	0.0
5 AKA086	7.0000	0.7000	0.2000	0.5000	700.0000	0.0
6 AKA085	7.0000	0.7000	0.2000	0.7000	700.0000	0.0
7 AKA509	3.0000	0.7000	0.3000	0.5000	500.0000	0.0
2 AKA508	3.0000	1.0000	0.2000	0.7000	700.0000	0.0
3 20 AKA507	3.0000	0.7000	0.1500	0.3000	500.0000	0.0

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TABLE 1

SAMPLE	BI PPM	CO PPM	CR PPM	CU PPM	LA PPM	NB PPM	PB PPM	NI PPM	SB PPM
26 / AKA360	0.0	20.0000	150.0000	70.0000	0.0	0.0	0.0	10.0000	0.0
2 AKA359	0.0	15.0000	150.0000	50.0000	0.0	0.0	0.0	100.0000	70.0000
3 AKA358	0.0	10.0000	100.0000	30.0000	0.0	0.0	0.0	70.0000	30.0000
4 AKA356	0.0	15.0000	150.0000	50.0000	0.0	0.0	0.0	70.0000	50.0000
5 AKA357	0.0	20.0000	150.0000	30.0000	0.0	0.0	0.0	100.0000	70.0000
6 AKA096	0.0	20.0000	70.0000	70.0000	0.0	0.0	0.0	30.0000	20.0000
7 AKA097	0.0	15.0000	100.0000	30.0000	0.0	0.0	0.0	30.0000	15.0000
8 AKA100	0.0	10.0000	100.0000	30.0000	0.0	0.0	0.0	30.0000	20.0000
9 AKA098	0.0	15.0000	100.0000	50.0000	0.0	0.0	0.0	50.0000	20.0000
10 AKA1271	30.0000	20.0000	150.0000	70.0000	0.0	0.0	0.0	10.0000	30.0000
11 AKA1265	0.0	20.0000	150.0000	70.0000	0.0	0.0	0.0	10.0000	50.0000
12 AKA1266	0.0	30.0000	150.0000	70.0000	0.0	0.0	0.0	10.0000	0.0
13 AKA1269	0.0	30.0000	150.0000	200.0000	0.0	0.0	0.0	100.0000	15.0000
14 AKA1270	0.0	5.0000	150.0000	150.0000	0.0	0.0	0.0	10.0000	10.0000
15 SAKA918	0.0	15.0000	150.0000	70.0000	0.0	0.0	0.0	10.0000	0.0
16 SAKA919	0.0	30.0000	150.0000	100.0000	0.0	0.0	0.0	15.0000	0.0
17 SAKA920	50.0000	50.0000	200.0000	150.0000	0.0	0.0	0.0	15.0000	0.0
18 FAKA921	15.0000	20.0000	150.0000	100.0000	0.0	0.0	0.0	10.0000	30.0000
19 AKA1267	0.0	20.0000	150.0000	70.0000	0.0	0.0	0.0	100.0000	30.0000
20 J70AK1268	0.0	20.0000	150.0000	70.0000	0.0	0.0	0.0	10.0000	20.0000
21 AKA407	0.0	30.0000	150.0000	70.0000	0.0	0.0	0.0	100.0000	15.0000
22 AKA406	0.0	30.0000	150.0000	70.0000	0.0	0.0	0.0	10.0000	70.0000
23 SAKA408	0.0	30.0000	150.0000	70.0000	0.0	0.0	0.0	100.0000	70.0000
24 YAKA405	0.0	30.0000	100.0000	70.0000	0.0	0.0	0.0	10.0000	50.0000
25 SAKA409	0.0	30.0000	150.0000	70.0000	0.0	0.0	0.0	100.0000	30.0000
26 LAKA410	0.0	15.0000	150.0000	50.0000	0.0	0.0	0.0	10.0000	30.0000
27 AKA404	0.0	20.0000	150.0000	70.0000	0.0	0.0	0.0	10.0000	50.0000
28 FAKA413	0.0	15.0000	150.0000	50.0000	0.0	0.0	0.0	10.0000	10.0000
29 AKA411	0.0	20.0000	150.0000	50.0000	0.0	0.0	0.0	10.0000	70.0000
30 AKA403	0.0	20.0000	150.0000	70.0000	0.0	0.0	0.0	10.0000	30.0000
31 AKA402	0.0	30.0000	150.0000	50.0000	0.0	0.0	0.0	10.0000	15.0000
32 2AKA091	0.0	30.0000	150.0000	70.0000	0.0	0.0	0.0	10.0000	150.0000
33 SAKA090	0.0	20.0000	150.0000	50.0000	0.0	0.0	0.0	100.0000	30.0000
34 YAKA099	0.0	20.0000	150.0000	30.0000	0.0	0.0	0.0	70.0000	15.0000
35 SAKA519	0.0	15.0000	150.0000	50.0000	0.0	0.0	0.0	10.0000	70.0000
36 SAKA088	0.0	30.0000	150.0000	70.0000	0.0	0.0	0.0	15.0000	20.0000
37 7AKA518	0.0	20.0000	150.0000	30.0000	0.0	0.0	0.0	15.0000	15.0000
38 FAKA516	0.0	20.0000	150.0000	50.0000	0.0	0.0	0.0	15.0000	70.0000
39 YAKA087	0.0	20.0000	150.0000	70.0000	0.0	0.0	0.0	10.0000	20.0000
40 SAKA087	0.0	20.0000	150.0000	30.0000	0.0	0.0	0.0	10.0000	100.0000
41 270AKA515	0.0	20.0000	150.0000	30.0000	0.0	0.0	0.0	0.0	50.0000
42 AKA086	0.0	20.0000	150.0000	150.0000	0.0	0.0	0.0	15.0000	70.0000
43 4AKA514	0.0	20.0000	150.0000	150.0000	0.0	0.0	0.0	15.0000	30.0000
44 3AKA513	0.0	15.0000	150.0000	50.0000	0.0	0.0	0.0	15.0000	70.0000
45 4AKA512	0.0	20.0000	150.0000	50.0000	0.0	0.0	0.0	15.0000	20.0000
46 SAKA084	0.0	20.0000	150.0000	50.0000	0.0	0.0	0.0	10.0000	70.0000
47 6AKA085	0.0	20.0000	150.0000	50.0000	0.0	0.0	0.0	10.0000	100.0000
48 7AKA511	0.0	15.0000	150.0000	50.0000	0.0	0.0	0.0	15.0000	70.0000
49 SAKA509	0.0	15.0000	150.0000	50.0000	0.0	0.0	0.0	15.0000	30.0000
50 FAKA508	0.0	20.0000	150.0000	30.0000	0.0	0.0	0.0	15.0000	50.0000
51 300AKA507	0.0	15.0000	150.0000	150.0000	0.0	0.0	0.0	30.0000	50.0000

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TABLE 1

SAMPLE	SC PPM	V PPM	W PPM	ZN PPM	AU PPM
25 / AKA360	15.0000	0.0	L	100.0000	0.0200L
1 AKA359	15.0000	0.0	N	100.0000	0.0200L
2 AKA358	10.0000	0.0	N	100.0000	0.0200L
3 AKA356	15.0000	0.0	N	100.0000	0.0200L
4 AKA357	15.0000	0.0	N	100.0000	0.0200L
5 AKA096	20.0000	0.0	N	100.0000	0.0200L
6 AKA097	10.0000	0.0	N	100.0000	0.0200L
7 AKA100	10.0000	0.0	N	100.0000	0.0200L
8 AKA098	10.0000	0.0	N	100.0000	0.0200L
9 AKA099	15.0000	0.0	N	100.0000	0.0200L
10 AKA1271	15.0000	0.0	N	100.0000	0.0200L
11 AKA1265	15.0000	0.0	N	100.0000	0.0200L
12 AKA1266	15.0000	0.0	N	100.0000	0.0200L
13 AKA1269	15.0000	0.0	N	100.0000	0.0200L
14 AKA1270	15.0000	0.0	N	100.0000	0.0200L
15 AKA918	15.0000	0.0	N	100.0000	0.0200L
16 AKA919	20.0000	0.0	N	100.0000	0.0200L
17 AKA920	30.0000	10.0000	N	100.0000	0.0200L
18 AKA921	15.0000	10.0000	N	100.0000	0.0200L
19 AKA1267	15.0000	0.0	N	100.0000	0.0200L
20 AKA1268	15.0000	0.0	N	100.0000	0.0200L
21 AKA407	15.0000	0.0	L	100.0000	0.0200L
22 AKA406	15.0000	30.0000	L	100.0000	0.0200L
23 AKA408	15.0000	0.0	L	100.0000	0.0200L
24 AKA405	15.0000	0.0	N	100.0000	0.0200L
25 AKA409	15.0000	0.0	N	100.0000	0.0200L
26 AKA410	15.0000	0.0	N	100.0000	0.0200L
27 AKA404	15.0000	0.0	N	100.0000	0.0200L
28 AKA413	15.0000	0.0	N	100.0000	0.0200L
29 AKA411	15.0000	0.0	N	100.0000	0.0200L
30 AKA403	15.0000	0.0	N	100.0000	0.0200L
31 AKA402	20.0000	0.0	N	100.0000	0.0200L
32 AKA091	15.0000	0.0	N	100.0000	0.0200L
33 AKA090	15.0000	0.0	N	100.0000	0.0200L
34 AKA089	10.0000	0.0	N	100.0000	0.0200L
35 AKA519	15.0000	0.0	N	100.0000	0.0200L
36 AKA088	20.0000	0.0	N	100.0000	0.0200L
37 AKA518	15.0000	0.0	N	100.0000	0.0200L
38 AKA516	15.0000	0.0	N	100.0000	0.0200L
39 AKA087	15.0000	0.0	N	100.0000	0.0200L
40 AKA515	15.0000	0.0	N	100.0000	0.0200L
41 AKA086	15.0000	0.0	N	100.0000	0.0200L
42 AKA514	15.0000	0.0	L	100.0000	0.0200L
43 JAKA513	15.0000	0.0	N	100.0000	0.0200L
44 YAKA512	15.0000	0.0	N	100.0000	0.0200L
45 SAKA084	15.0000	0.0	N	100.0000	0.0200L
46 AKA085	15.0000	0.0	N	100.0000	0.0200L
47 YAKA511	15.0000	0.0	N	100.0000	0.0200L
48 AKA509	15.0000	0.0	N	100.0000	0.0200L
49 AKA508	15.0000	0.0	N	100.0000	0.0200L
50 AKA507	15.0000	0.0	N	100.0000	0.0200L

TABLE 1

SAMPLE	FE PCT	CA PCT	MN PPM	AS PPM	B PPM	BA PPM	BE PPM
30/ AKA504	5.0000	0.7000	0.7000	0.5000	30.0000	700.0000	0.0 L
2 AKA505	5.0000	0.7000	0.7000	0.5000	30.0000	700.0000	0.0 L
3 AKA503	3.0000	0.7000	0.7000	0.5000	30.0000	700.0000	0.0 L
4 AKA501	5.0000	0.7000	0.7000	0.5000	50.0000	700.0000	1.5000 N
5 AKA083	3.0000	0.7000	0.7000	0.5000	500.0000	20.0000	700.0000
6 AKA502	3.0000	0.7000	0.7000	0.5000	30.0000	500.0000	0.0 L
7 AKA082	7.0000	1.0000	0.2000	0.5000	30.0000	700.0000	0.0 L
8 AKI053	5.0000	1.5000	0.7000	0.5000	20.0000	700.0000	0.0 L
7 AKI052	15.0000	1.5000	0.5000	0.5000	50.0000	1000.0000	1.0000 L
3/0 AKI1459	10.0000	1.5000	2.0000	0.5000	2000.0000	1.5000	700.0000
1 AKI1054	3.0000	1.0000	0.5000	0.3000	700.0000	0.5000	3.0000 N
2 AKI1460	10.0000	1.5000	1.5000	0.5000	1500.0000	10.0000	500.0000
3 AKI1055	3.0000	1.0000	0.7000	0.3000	1000.0000	0.5000	1.0000 L
YAKI056	3.0000	0.7000	0.7000	0.3000	500.0000	0.0 L	0.0 L
SAK1057	5.0000	1.0000	1.5000	0.3000	700.0000	0.0 L	1.0000 L
6 AKI1058	5.0000	1.0000	1.5000	0.3000	700.0000	0.0 N	1.0000 L
7 AKI1061	3.0000	0.7000	1.0000	0.3000	700.0000	0.0 L	1.0000 L
8 AKI1059	5.0000	1.0000	1.5000	0.5000	1000.0000	1.5000	300.0000
9 AKI1060	7.0000	1.5000	1.5000	0.5000	1500.0000	0.0 L	20.0000 L
32/0 AKI1062	5.0000	1.0000	0.7000	0.3000	1500.0000	1.0000	30.0000 L
/ AKI1063	7.0000	0.7000	0.7000	0.3000	700.0000	0.7000	10.0000 L
2 AKI1064	5.0000	0.7000	0.7000	0.2000	700.0000	1.5000	200.0000 L
3 AKI1065	3.0000	0.7000	1.0000	0.3000	1000.0000	1.0000	30.0000 L
4 AKI1066	5.0000	1.0000	1.0000	0.3000	1000.0000	0.7000	10.0000 L
5 AKI1069	7.0000	1.5000	1.5000	0.5000	1000.0000	0.7000	70.0000 L
33/0 AKI1676	10.0000	1.5000	1.5000	0.5000	300.0000	1.5000	300.0000 L
/ AKI1071	3.0000	0.7000	1.0000	0.3000	1500.0000	1.5000	200.0000 L
7 AKI1072	5.0000	1.0000	1.5000	0.3000	1000.0000	1.0000	20.0000 L
8 AKI1070	7.0000	1.5000	1.5000	0.5000	700.0000	1.5000	200.0000 L
9 AKI1068	7.0000	1.5000	1.5000	0.3000	1500.0000	0.0 L	0.0 L
2 AKI1675	10.0000	1.5000	1.5000	0.5000	1000.0000	2.0000	300.0000 L
/ AKI1067	7.0000	1.0000	1.5000	0.3000	1500.0000	1.5000	200.0000 L
7 AKI1675	10.0000	1.5000	2.0000	0.5000	1000.0000	1.0000	200.0000 N
3 AKI1674	15.0000	1.5000	1.5000	0.5000	1500.0000	0.0 L	0.0 N
4 AKI1673	15.0000	3.0000	3.0000	0.7000	1500.0000	1.5000	150.0000 N
5 AKI124	5.0000	1.5000	0.7000	0.3000	700.0000	0.0 N	20.0000 N
6 AKI123	7.0000	1.5000	0.7000	0.3000	1000.0000	0.7000	50.0000 N
7 AKI122	7.0000	1.5000	2.0000	0.5000	1500.0000	0.0 N	10.0000 N
8 AKI121	7.0000	2.0000	1.5000	0.7000	1000.0000	0.0 N	15.0000 N
7 AKI120	7.0000	2.0000	1.5000	0.7000	1500.0000	0.0 N	50.0000 N
34/0 AKI119	10.0000	1.5000	1.5000	0.5000	2000.0000	0.0 L	50.0000 N
/ AKI118	7.0000	1.0000	0.3000	0.7000	700.0000	0.0 N	70.0000 N
2 AKI116	7.0000	1.5000	0.7000	0.7000	2000.0000	0.7000	50.0000 N
3 AKI117	10.0000	1.0000	0.7000	1.0000	1500.0000	0.0 L	70.0000 N
9 AKI1230	5.0000	1.0000	0.5000	0.7000	1000.0000	0.5000	100.0000 N
SAK1458	15.0000	1.5000	1.0000	0.5000	3000.0000	1.5000	300.0000 N
6 AKI1051	7.0000	1.5000	0.7000	0.5000	1500.0000	1.0000	30.0000 N
7 AKI1457	20.0000	3.0000	2.0000	0.7000	2000.0000	0.7000	100.0000 N
8 AKI1050	5.0000	1.0000	0.7000	0.3000	1500.0000	0.0 L	30.0000 N
5 AKI1049	5.0000	1.0000	1.5000	0.3000	1500.0000	1.0000	15.0000 N
35/0 AKI1036	3.0000	0.7000	0.7000	0.3000	1500.0000	0.7000	15.0000 N

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TABLE I

SAMPLE	BI PPM	CO PPM	CR PPM	CU PPM	LA PPM	NB PPM	NI PPM	PB PPM	SB PPM
30 / AK1504	0.0	20.0000	150.0000	50.0000	0.0	L	15.0000	30.0000	0.0
2 AK1505	0.0	20.0000	150.0000	70.0000	0.0	L	15.0000	30.0000	0.0
3 AK1503	0.0	15.0000	150.0000	50.0000	0.0	L	10.0000	70.0000	0.0
4 AK1501	0.0	15.0000	150.0000	30.0000	0.0	L	15.0000	100.0000	0.0
5 AK1503	0.0	15.0000	150.0000	30.0000	0.0	L	15.0000	100.0000	0.0
6 AK1502	0.0	15.0000	150.0000	30.0000	0.0	L	0.0	50.0000	20.0000
7 AK1082	0.0	15.0000	150.0000	70.0000	0.0	L	10.0000	70.0000	30.0000
8 AK1053	0.0	15.0000	100.0000	20.0000	0.0	L	0.0	50.0000	0.0
9 AK1052	0.0	70.0000	150.0000	70.0000	0.0	L	10.0000	150.0000	100.0000
31 0 AK1459	0.0	30.0000	30.0000	10.0000	0.0	L	10.0000	100.0000	0.0
1 AK1054	0.0	10.0000	70.0000	20.0000	0.0	L	10.0000	100.0000	0.0
2 AK1460	0.0	20.0000	15.0000	70.0000	0.0	L	0.0	50.0000	0.0
3 AK1055	0.0	10.0000	15.0000	10.0000	0.0	L	10.0000	50.0000	0.0
YAK1056	0.0	5.0000	15.0000	10.0000	0.0	L	0.0	15.0000	0.0
5 AK1057	0.0	10.0000	30.0000	20.0000	0.0	L	10.0000	50.0000	0.0
6 AK1058	0.0	10.0000	15.0000	10.0000	0.0	L	10.0000	15.0000	0.0
7 AK1061	0.0	5.0000	20.0000	10.0000	0.0	L	0.0	30.0000	0.0
8 AK1059	0.0	15.0000	30.0000	30.0000	0.0	L	10.0000	100.0000	0.0
9 AK1060	0.0	20.0000	100.0000	50.0000	0.0	L	10.0000	50.0000	30.0000
32 0 AK1062	0.0	30.0000	100.0000	0.0	0.0	L	10.0000	150.0000	70.0000
1 AK1063	0.0	20.0000	30.0000	20.0000	0.0	L	10.0000	15.0000	70.0000
3 AK1064	0.0	15.0000	70.0000	30.0000	0.0	L	10.0000	30.0000	150.0000
4 AK1065	0.0	10.0000	20.0000	20.0000	0.0	L	0.0	15.0000	70.0000
5 AK1066	0.0	10.0000	50.0000	20.0000	0.0	L	10.0000	20.0000	30.0000
6 AK1069	0.0	30.0000	150.0000	70.0000	0.0	L	10.0000	70.0000	70.0000
6 AK1071	0.0	30.0000	70.0000	50.0000	0.0	L	10.0000	100.0000	10.0000
7 AK1072	0.0	30.0000	70.0000	50.0000	0.0	L	10.0000	30.0000	150.0000
8 AK1070	0.0	30.0000	70.0000	50.0000	0.0	L	10.0000	30.0000	200.0000
9 AK1068	0.0	30.0000	150.0000	50.0000	0.0	L	10.0000	50.0000	30.0000
33 0 AK1676	0.0	30.0000	50.0000	70.0000	0.0	L	10.0000	30.0000	200.0000
1 AK1067	0.0	20.0000	70.0000	70.0000	0.0	L	10.0000	30.0000	100.0000
2 AK1675	0.0	30.0000	50.0000	70.0000	0.0	L	10.0000	30.0000	70.0000
3 AK1674	0.0	50.0000	150.0000	70.0000	0.0	L	10.0000	100.0000	30.0000
YAK1673	0.0	30.0000	70.0000	70.0000	0.0	L	10.0000	70.0000	150.0000
5 AK1124	0.0	10.0000	70.0000	20.0000	0.0	L	0.0	30.0000	30.0000
6 AK1123	0.0	20.0000	70.0000	30.0000	0.0	L	10.0000	30.0000	100.0000
7 AK1122	0.0	20.0000	100.0000	30.0000	0.0	L	10.0000	30.0000	100.0000
1 AK1121	0.0	15.0000	150.0000	30.0000	0.0	L	10.0000	10.0000	15.0000
9 AK1120	0.0	15.0000	100.0000	30.0000	0.0	L	10.0000	10.0000	50.0000
5 AK1119	0.0	30.0000	100.0000	100.0000	0.0	L	10.0000	200.0000	300.0000
6 AK1118	0.0	15.0000	150.0000	50.0000	0.0	L	10.0000	150.0000	10.0000
7 AK1116	0.0	20.0000	150.0000	70.0000	0.0	L	10.0000	100.0000	30.0000
3 AK1117	0.0	15.0000	150.0000	30.0000	0.0	L	10.0000	70.0000	15.0000
JAK1120	0.0	30.0000	150.0000	70.0000	0.0	L	10.0000	100.0000	50.0000
5 AK1119	0.0	100.0000	150.0000	200.0000	0.0	L	0.0	100.0000	70.0000
6 AK1118	0.0	30.0000	150.0000	70.0000	0.0	L	0.0	150.0000	30.0000
7 AK1457	0.0	100.0000	150.0000	150.0000	0.0	L	10.0000	150.0000	70.0000
8 AK1050	0.0	20.0000	70.0000	30.0000	0.0	L	10.0000	50.0000	15.0000
9 AK1049	0.0	10.0000	20.0000	30.0000	0.0	L	10.0000	10.0000	70.0000
35 0 AK1036	0.0	15.0000	30.0000	30.0000	0.0	L	10.0000	30.0000	70.0000

TABLE 1

SAMPLE	SC PPM	V PPM	Y PPM	ZN PPM	AU PPM
30/AK1054	20.0000	200.0000	15.0000	0.0	0.0200
2/AK1055	15.0000	0.0	0.0	0.0	0.0200
3/AK1053	15.0000	0.0	0.0	0.0	0.0200
4/AK1050	15.0000	0.0	0.0	0.0	0.0200
5/AK1051	15.0000	0.0	0.0	0.0	0.0200
6/AK1052	10.0000	0.0	0.0	0.0	0.1000
7/AK1053	15.0000	0.0	0.0	0.0	0.0200
8/AK1054	15.0000	0.0	0.0	0.0	0.0200
9/AK1055	15.0000	0.0	0.0	0.0	0.0200
10/AK1056	15.0000	0.0	0.0	0.0	0.0200
SAK1057	15.0000	0.0	0.0	0.0	0.0200
32/AK1059	15.0000	0.0	0.0	0.0	0.0200
6/AK1058	10.0000	0.0	0.0	0.0	0.0200
7/AK1060	15.0000	0.0	0.0	0.0	0.0200
3/AK1061	10.0000	0.0	0.0	0.0	0.0200
7/AK1062	10.0000	0.0	0.0	0.0	0.0200
SAK1063	10.0000	0.0	0.0	0.0	0.0200
2/AK1064	10.0000	0.0	0.0	0.0	0.0200
3/AK1065	10.0000	0.0	0.0	0.0	0.0200
4/AK1066	15.0000	0.0	0.0	0.0	0.0200
SAK1069	15.0000	0.0	0.0	0.0	0.0200
6/AK1071	15.0000	0.0	0.0	0.0	0.0200
7/AK1072	15.0000	0.0	0.0	0.0	0.0200
7/AK1070	15.0000	0.0	0.0	0.0	0.0200
9/AK1068	15.0000	0.0	0.0	0.0	0.0200
33/AK1076	15.0000	0.0	0.0	0.0	0.0200
7/AK1067	15.0000	0.0	0.0	0.0	0.0200
2/AK1075	15.0000	0.0	0.0	0.0	0.0200
3/AK1074	20.0000	0.0	0.0	0.0	0.0200
4/AK1073	15.0000	0.0	0.0	0.0	0.0200
5/AK1074	7.0000	0.0	0.0	0.0	0.0200
6/AK1123	10.0000	0.0	0.0	0.0	0.0200
7/AK1122	15.0000	0.0	0.0	0.0	0.0200
8/AK1121	15.0000	0.0	0.0	0.0	0.0200
9/AK1120	10.0000	0.0	0.0	0.0	0.0200
34/AK1119	15.0000	0.0	0.0	0.0	0.0200
7/AK1118	10.0000	0.0	0.0	0.0	0.0200
7/AK1116	15.0000	0.0	0.0	0.0	0.0200
3/AK1117	15.0000	0.0	0.0	0.0	0.0400
4/AK1130	15.0000	0.0	0.0	0.0	0.0200
5/AK1458	15.0000	0.0	0.0	0.0	0.0200
6/AK1051	15.0000	0.0	0.0	0.0	0.0200
7/AK1457	30.0000	0.0	0.0	0.0	0.0200
8/AK1050	15.0000	0.0	0.0	0.0	0.0200
9/AK1049	15.0000	0.0	0.0	0.0	0.0200
35/AK1036	10.0000	0.0	0.0	0.0	0.0200

TABLE 1

SAMPLE	FE PCT	CA PCT	TI PCT	MN PPM	BA PPM	BE PPM
35 /AK1455	15.0000	1.5000	0.7000	1500.0000	700.0000	1.5000
ZAK1037	3.0000	0.7000	0.3000	700.0000	15.0000	1.0000
SAK1456	15.0000	1.5000	0.5000	1000.0000	20.0000	1.5000
YAK1041	3.0000	1.0000	1.5000	1000.0000	20.0000	1.0000
SAK1042	3.0000	1.0000	1.0000	1000.0000	20.0000	1.0000
ZAK1043	10.0000	0.7000	1.0000	0.3000	20.0000	1.5000
7AK1035	3.0000	1.5000	1.0000	1000.0000	30.0000	0.0
7AK1038	3.0000	1.0000	0.7000	700.0000	20.0000	0.0
9AK1039	3.0000	1.0000	1.0000	1000.0000	20.0000	0.0
6AK1040	3.0000	1.0000	0.7000	0.3000	20.0000	0.0
7AK1048	3.0000	0.7000	0.7000	0.3000	30.0000	0.0
ZAK1045	5.0000	1.5000	1.0000	0.5000	2000.0000	500.0000
3AK1044	5.0000	1.5000	1.5000	0.5000	1000.0000	200.0000
YAK1046	3.0000	1.0000	1.0000	0.5000	1000.0000	200.0000
SAK1047	3.0000	1.0000	0.7000	0.5000	1500.0000	0.0
6AK1461	10.0000	1.5000	0.7000	0.5000	2000.0000	0.0
7AK1463	15.0000	3.0000	1.5000	0.7000	2000.0000	0.0
FAK1462	10.0000	2.0000	2.0000	0.7000	1500.0000	1.0000
9AK1464	10.0000	1.5000	0.7000	0.7000	1500.0000	1.0000
370 AK1465	15.0000	3.0000	1.5000	1.0000	2000.0000	0.0
1/ AK1466	15.0000	2.0000	1.5000	1.0000	1500.0000	2.00000
LAK1143	3.0000	1.0000	0.7000	0.7000	1500.0000	2.00000
3AK1144	5.0000	1.5000	0.7000	0.7000	1000.0000	2.00000
4AKA401	7.0000	1.0000	0.5000	0.5000	1500.0000	1.0000
SAKA129	10.0000	1.5000	0.5000	0.7000	1500.0000	0.0
6AKA130	10.0000	1.0000	1.0000	0.5000	1500.0000	1.0000
ZAK1131	15.0000	2.0000	1.5000	0.7000	2000.0000	0.0
FAKA132	15.0000	1.5000	3.0000	0.7000	1000.0000	30.0000
9AKA133	3.0000	1.0000	7.0000	0.2000	1500.0000	30.0000
380 AKA137	10.0000	2.0000	1.5000	0.7000	700.0000	100.0000
1/ AKA136	10.0000	3.0000	1.0000	0.5000	500.0000	20.0000
ZAKA134	10.0000	2.0000	5.0000	1.0000	700.0000	50.0000
3AKA135	3.0000	1.0000	1.5000	0.5000	1500.0000	30.0000
4AKA151	5.0000	1.5000	1.0000	0.7000	1500.0000	100.0000
5AKA150	15.0000	1.0000	0.5000	0.7000	1500.0000	70.0000
6AKA149	10.0000	1.0000	0.5000	0.7000	1000.0000	100.0000
7AKA148	7.0000	1.5000	2.0000	0.7000	1500.0000	0.0
3AKA139	3.0000	1.5000	1.0000	0.5000	700.0000	1.0000
9AKA138	5.0000	1.5000	1.5000	0.7000	1000.0000	0.0
340 AKA253	7.0000	1.5000	1.5000	0.7000	300.0000	0.5000
1/ AKA140	15.0000	1.0000	0.5000	0.7000	1500.0000	0.0
YAKA141	15.0000	1.5000	1.5000	1.0000	1500.0000	50.0000
3AKA077	7.0000	2.0000	1.5000	1.0000	1500.0000	20.0000
YAKA142	15.0000	1.0000	0.5000	0.7000	1000.0000	30.0000
SAKA078	15.0000	1.0000	0.3000	0.7000	1500.0000	30.0000
6AKA143	15.0000	1.5000	1.5000	0.5000	0.7000	1000.0000
7AKA144	15.0000	1.5000	0.5000	0.7000	1000.0000	50.0000
1/ AK145	15.0000	1.5000	0.7000	0.7000	1500.0000	70.0000
9AKA146	15.0000	2.0000	1.5000	1.0000	1500.0000	100.0000
400 AKA147	10.0000	1.5000	1.5000	1.0000	300.0000	150.0000

TABLE 1

SAMPLE	RI PPM	CO PPM	CR PPM	CU PPM	LA PPM	MD PPM	NB PPM	NI PPM	PB PPM	SB PPM
35 /AK1455	0.0	N	50.0000	50.0000	0.0	L	0.0	30.0000	15.0000	0.0
ZAK1037	0.0	N	30.0000	10.0000	0.0	L	0.0	10.0000	30.0000	0.0
JAK1456	0.0	N	20.0000	20.0000	0.0	L	0.0	10.0000	30.0000	0.0
YAK1041	0.0	N	30.0000	15.0000	0.0	L	0.0	10.0000	30.0000	0.0
JAK1042	0.0	N	30.0000	10.0000	0.0	L	0.0	10.0000	15.0000	0.0
6AK1043	0.0	N	30.0000	30.0000	0.0	L	0.0	10.0000	50.0000	30.0000
7AK1035	0.0	N	20.0000	150.0000	0.0	L	0.0	10.0000	70.0000	30.0000
FAK1038	0.0	N	10.0000	70.0000	0.0	L	0.0	10.0000	30.0000	0.0
FAK1039	0.0	N	15.0000	50.0000	0.0	L	0.0	10.0000	30.0000	0.0
36 /AK1040	0.0	N	10.0000	20.0000	0.0	L	0.0	10.0000	20.0000	0.0
/AK1048	0.0	N	10.0000	30.0000	0.0	L	0.0	10.0000	30.0000	0.0
3AK1045	0.0	N	20.0000	70.0000	0.0	L	0.0	10.0000	30.0000	0.0
YAK1046	0.0	N	20.0000	70.0000	0.0	L	0.0	10.0000	20.0000	0.0
5AK1047	0.0	N	20.0000	70.0000	0.0	L	0.0	10.0000	70.0000	0.0
6AK1461	0.0	N	30.0000	150.0000	0.0	L	0.0	10.0000	100.0000	30.0000
7AK1463	0.0	N	50.0000	200.0000	0.0	L	0.0	15.0000	150.0000	70.0000
8AK1462	0.0	N	30.0000	100.0000	0.0	L	0.0	10.0000	70.0000	30.0000
7AK1464	0.0	N	30.0000	150.0000	0.0	L	0.0	10.0000	150.0000	30.0000
370AK1465	0.0	N	30.0000	150.0000	0.0	L	0.0	15.0000	150.0000	30.0000
/AK1466	0.0	N	30.0000	150.0000	0.0	L	0.0	15.0000	150.0000	30.0000
2AK1143	0.0	N	20.0000	100.0000	0.0	L	0.0	10.0000	70.0000	50.0000
3AK1144	0.0	N	20.0000	150.0000	0.0	L	0.0	10.0000	50.0000	30.0000
4AKA01	0.0	N	20.0000	100.0000	0.0	L	0.0	10.0000	100.0000	30.0000
SAKA129	0.0	N	20.0000	200.0000	0.0	L	0.0	10.0000	100.0000	20.0000
6AKA130	0.0	N	30.0000	150.0000	0.0	L	0.0	15.0000	70.0000	30.0000
7AKA131	0.0	N	30.0000	100.0000	0.0	L	0.0	10.0000	100.0000	30.0000
8AKA132	0.0	N	30.0000	70.0000	0.0	L	0.0	10.0000	50.0000	20.0000
1AKA133	0.0	N	15.0000	150.0000	0.0	L	0.0	10.0000	30.0000	0.0
20.0000	0.0	N	20.0000	150.0000	0.0	L	0.0	10.0000	30.0000	0.0
380AKA137	0.0	N	20.0000	70.0000	0.0	L	0.0	10.0000	100.0000	15.0000
1AKA136	0.0	N	20.0000	150.0000	0.0	L	0.0	10.0000	30.0000	0.0
7AKA134	0.0	N	10.0000	150.0000	0.0	L	0.0	10.0000	10.0000	15.0000
3AKA135	0.0	N	5.0000	7.0000	0.0	L	0.0	10.0000	10.0000	30.0000
YAKA151	0.0	N	10.0000	70.0000	0.0	L	0.0	10.0000	100.0000	20.0000
SAKA150	0.0	N	20.0000	150.0000	0.0	L	0.0	10.0000	100.0000	50.0000
6AKA149	0.0	N	15.0000	150.0000	0.0	L	0.0	10.0000	70.0000	10.0000
7AKA148	0.0	N	10.0000	70.0000	0.0	L	0.0	10.0000	30.0000	15.0000
8AKA139	0.0	N	5.0000	50.0000	0.0	L	0.0	10.0000	50.0000	30.0000
9AKA138	0.0	N	7.0000	150.0000	0.0	L	0.0	10.0000	100.0000	20.0000
370AKA253	20.0000	N	5.0000	70.0000	0.0	L	0.0	7.0000	10.0000	30.0000
/AKA140	0.0	N	30.0000	150.0000	0.0	L	0.0	10.0000	100.0000	30.0000
2AKA141	0.0	N	20.0000	150.0000	0.0	L	0.0	10.0000	150.0000	20.0000
3AKA077	0.0	N	20.0000	150.0000	0.0	L	0.0	10.0000	30.0000	0.0
9AKA162	0.0	N	20.0000	150.0000	0.0	L	0.0	10.0000	100.0000	20.0000
SAKA078	0.0	N	15.0000	70.0000	0.0	L	0.0	7.0000	70.0000	30.0000
6AKA143	0.0	N	20.0000	150.0000	0.0	L	0.0	10.0000	100.0000	30.0000
/AKA144	0.0	N	20.0000	200.0000	0.0	L	0.0	10.0000	100.0000	15.0000
8AKA145	0.0	N	20.0000	150.0000	0.0	L	0.0	10.0000	100.0000	20.0000
9AKA146	0.0	N	30.0000	150.0000	0.0	L	0.0	10.0000	150.0000	30.0000
460AKA147	0.0	N	15.0000	150.0000	0.0	L	0.0	70.0000	70.0000	10.0000

TABLE 1

SAMPLE	SC PPM	V PPM	Y PPM	ZR PPM	AU PPM
36'AKI455	20.0000	300.0000	20.0000	150.0000	0.0200L
1AKI037	7.0000	0.0	70.0000	0.0	0.0200L
3 AKI456	15.0000	0.0	200.0000	0.0	0.0200L
4 AKI041	10.0000	0.0	300.0000	15.0000	0.0200L
5 AKI042	10.0000	0.0	200.0000	15.0000	0.0200L
6 AKI043	15.0000	0.0	200.0000	15.0000	0.0200L
7 AKI035	15.0000	0.0	200.0000	15.0000	0.0200L
8 AKI038	10.0000	0.0	150.0000	15.0000	0.0200L
9 AKI039	10.0000	0.0	150.0000	15.0000	0.0200L
360 AKI040	7.0000	0.0	100.0000	10.0000	0.0200L
1 AKI048	10.0000	0.0	100.0000	20.0000	0.0200L
2 AKI045	15.0000	0.0	200.0000	15.0000	0.0200L
3 AKI044	15.0000	0.0	200.0000	15.0000	0.0200L
4 AKI046	15.0000	0.0	300.0000	15.0000	0.0200L
5 AKI047	15.0000	0.0	200.0000	15.0000	0.0200L
6 AKI041	15.0000	0.0	150.0000	300.0000	0.0200L
7 AKI043	30.0000	0.0	300.0000	200.0000	0.0200L
8 AKI042	20.0000	0.0	300.0000	200.0000	0.0200L
9 AKI044	15.0000	0.0	200.0000	15.0000	0.0200L
5AKA01	15.0000	0.0	100.0000	15.0000	0.0200L
5AKA129	15.0000	0.0	150.0000	20.0000	0.0200L
6AKA130	15.0000	0.0	200.0000	30.0000	0.0200L
7AKA131	15.0000	0.0	150.0000	15.0000	0.0200L
8AKA132	15.0000	0.0	200.0000	15.0000	0.0200L
1AKA133	10.0000	0.0	100.0000	15.0000	0.0200L
380 AKA137	15.0000	0.0	200.0000	15.0000	0.0200L
381 AKA136	20.0000	0.0	200.0000	15.0000	0.0200L
1AKA134	20.0000	0.0	300.0000	20.0000	0.0200L
2AKA135	10.0000	0.0	300.0000	20.0000	0.0200L
4AKA151	15.0000	0.0	500.0000	15.0000	0.0200L
5AKA150	15.0000	0.0	300.0000	15.0000	0.0200L
6AKA149	15.0000	0.0	200.0000	15.0000	0.0200L
7AKA148	20.0000	0.0	150.0000	200.0000	0.0200L
8AKA139	10.0000	0.0	500.0000	70.0000	0.0200L
9AKA138	15.0000	0.0	200.0000	15.0000	0.0200L
380 AKA253	15.0000	0.0	300.0000	100.0000	0.0200L
6AKA143	15.0000	0.0	100.0000	200.0000	0.0200L
7AKA141	15.0000	0.0	150.0000	300.0000	0.0200L
8AKA077	20.0000	0.0	300.0000	200.0000	0.0200L
4AKA142	15.0000	0.0	100.0000	200.0000	0.0200L
5AKA078	15.0000	0.0	100.0000	150.0000	0.0200L
6AKA140	15.0000	0.0	100.0000	200.0000	0.0200L
7AKA144	15.0000	0.0	100.0000	15.0000	0.0200L
8AKA145	15.0000	0.0	300.0000	300.0000	0.0200L
9AKA146	30.0000	0.0	300.0000	20.0000	0.0200L
406AKA147	15.0000	0.0	200.0000	20.0000	0.0400

TABLE 1

SAMPLE	FE PCT	CA PCT	MN PPT	AS PPM	AG PPM	B PPM	BA PPM	BE PPM
40/ AKA079	10.0000	0.7000	1500.0000	0.0	0.0	0.0	0.0	0.0
2 AKA080	7.0000	0.7000	5000.0000	0.0	0.0	700.0000	700.0000	700.0000
3 AKA081	10.0000	1.5000	7000.0000	0.0	0.0	700.0000	700.0000	700.0000
4 AKA220	3.0000	1.0000	1000.0000	0.0	0.0	700.0000	700.0000	1.0000
SAKA219	5.0000	1.5000	1000.0000	0.0	0.0	300.0000	300.0000	0.0
6 AKA221	5.0000	1.0000	1000.0000	0.0	0.0	300.0000	300.0000	0.0
7 AKA222	5.0000	1.5000	1000.0000	0.0	0.0	700.0000	700.0000	0.0
8 AKA223	5.0000	1.5000	1000.0000	0.0	0.0	700.0000	700.0000	0.0
7 AKA224	3.0000	0.7000	1000.0000	0.0	0.0	700.0000	700.0000	0.0
40/ AKA218	3.0000	1.0000	1000.0000	0.0	0.0	500.0000	500.0000	0.0
1 / AKA217	5.0000	1.5000	1000.0000	0.0	0.0	10.0000	700.0000	0.0
2 AKA216	3.0000	1.0000	1000.0000	0.0	0.0	10.0000	700.0000	1.0000
3 AKA225	1.50000	0.0700	0.0	0.0	0.0	0.0	700.0000	0.0
9 AKA215	3.0000	1.0000	1000.0000	0.0	0.0	10.0000	700.0000	1.5000
SAKA894	3.0000	0.7000	1000.0000	0.0	0.0	10.0000	700.0000	1.5000
6 AKA893	10.0000	1.0000	1000.0000	0.0	0.0	10.0000	700.0000	1.5000
7 AKA895	7.0000	1.5000	1000.0000	0.0	0.0	10.0000	700.0000	1.5000
8 AKA896	10.0000	1.0000	1000.0000	0.0	0.0	10.0000	700.0000	1.5000
7 AKA693	15.0000	1.5000	1000.0000	0.0	0.0	10.0000	700.0000	0.0
420/ AKA214	5.0000	1.0000	1000.0000	0.0	0.0	20.0000	700.0000	0.0
1 / AKA63	15.0000	1.5000	1000.0000	0.0	0.0	10.0000	1000.0000	0.0
2 AKA64	10.0000	1.0000	1000.0000	0.0	0.0	10.0000	700.0000	0.0
3 AKA65	15.0000	0.7000	0.0	0.0	0.0	0.0	700.0000	0.0
9 AKA66	15.0000	1.5000	1000.0000	0.0	0.0	10.0000	700.0000	0.0
SAKA213	15.0000	3.0000	0.7000	0.0	0.0	30.0000	700.0000	0.0
6 AKA694	15.0000	3.0000	1.5000	0.0	0.0	30.0000	700.0000	1.0000
7 AKA695	15.0000	5.0000	1.5000	0.0	0.0	30.0000	700.0000	1.0000
8 AKA696	5.0000	1.5000	1000.0000	0.0	0.0	30.0000	700.0000	1.0000
7 AKA697	15.0000	3.0000	1.5000	0.0	0.0	15.0000	300.0000	0.0
430/ AKA218	15.0000	2.0000	1.5000	0.0	0.0	30.0000	1000.0000	1.5000
1 / AKA212	10.0000	1.0000	0.2000	0.0	0.0	0.0	700.0000	0.0
2 AKA67	15.0000	1.0000	0.3000	0.0	0.0	30.0000	700.0000	0.0
3 AKA68	15.0000	1.0000	0.3000	0.0	0.0	50.0000	700.0000	1.5000
YAKA69	5.0000	0.7000	0.1500	0.0	0.0	10.0000	300.0000	0.0
JAKA70	10.0000	0.7000	0.3000	0.0	0.0	20.0000	700.0000	1.5000
LAKA071	10.0000	1.0000	0.3000	0.0	0.0	30.0000	700.0000	1.5000
JAKA072	7.0000	1.0000	0.7000	0.0	0.0	30.0000	700.0000	1.5000
8 AKA073	3.0000	1.0000	0.7000	0.0	0.0	0.0	700.0000	0.0
7 AKA074	5.0000	1.0000	0.7000	0.0	0.0	50.0000	700.0000	0.0
440/ AKA076	10.0000	1.5000	0.5000	0.0	0.0	30.0000	1000.0000	0.0
1 / AKA075	5.0000	1.5000	1.5000	0.0	0.0	15.0000	700.0000	0.0
2 AKA36	10.0000	1.5000	0.7000	0.0	0.0	30.0000	700.0000	0.0
3 AKA35	15.0000	1.5000	0.7000	0.0	0.0	50.0000	700.0000	0.0
YAKA34	15.0000	1.5000	0.7000	0.0	0.0	30.0000	700.0000	0.0
SAKA33	15.0000	1.5000	0.7000	0.0	0.0	70.0000	700.0000	1.0000
LAKA32	15.0000	1.5000	1.0000	0.0	0.0	100.0000	1000.0000	1.5000
7 AKA31	15.0000	1.5000	1.0000	0.0	0.0	70.0000	700.0000	1.5000
8 AKA330	15.0000	1.5000	0.7000	0.0	0.0	50.0000	700.0000	0.0
YAKA329	20.0000	3.0000	1.0000	0.0	0.0	15.0000	500.0000	1.0000
450/ AKA328	20.0000	2.0000	1.5000	0.7000	0.0	50.0000	3000.0000	1.5000

TABLE 1

SAMPLE	BI PPM	CO PPM	CR PPM	CU PPM	LA PPM	MO PPM	NI PPM	PB PPM	PPM
40 AKA079	0.0	10.0000	150.0000	50.0000	0.0	0.0	10.0000	0.0	0.0
2 AKA080	0.0	20.0000	150.0000	70.0000	0.0	0.0	50.0000	15.0000	0.0
9 AKA081	0.0	15.0000	150.0000	70.0000	0.0	0.0	70.0000	15.0000	0.0
Y AKA220	0.0	10.0000	20.0000	15.0000	0.0	0.0	10.0000	15.0000	0.0
5 AKA219	0.0	10.0000	50.0000	150.0000	0.0	0.0	10.0000	30.0000	0.0
6 AKA221	0.0	10.0000	30.0000	20.0000	0.0	0.0	10.0000	150.0000	0.0
7 AKA222	0.0	10.0000	70.0000	30.0000	0.0	0.0	10.0000	100.0000	0.0
8 AKA223	0.0	10.0000	30.0000	30.0000	0.0	0.0	0.0	70.0000	0.0
Y AKA224	0.0	0.0	10.0000	15.0000	0.0	0.0	10.0000	0.0	0.0
9 AKA218	0.0	7.0000	30.0000	0.0	0.0	0.0	0.0	70.0000	0.0
4/0 AKA218	0.0	7.0000	150.0000	50.0000	0.0	0.0	10.0000	70.0000	0.0
1 AKA217	0.0	15.0000	150.0000	50.0000	0.0	0.0	10.0000	150.0000	0.0
2 AKA216	0.0	5.0000	50.0000	20.0000	0.0	0.0	10.0000	30.0000	0.0
3 AKA225	70.0000	0.0	0.0	70.0000	0.0	0.0	0.0	0.0	N
Y AKA215	0.0	10.0000	30.0000	20.0000	0.0	0.0	0.0	20.0000	0.0
5 AKA894	0.0	5.0000	20.0000	30.0000	0.0	0.0	0.0	20.0000	0.0
6 AKA893	0.0	15.0000	15.0000	70.0000	0.0	0.0	5.0000	10.0000	0.0
1 AKA895	0.0	15.0000	20.0000	20.0000	0.0	0.0	10.0000	10.0000	0.0
2 AKA896	0.0	15.0000	20.0000	30.0000	0.0	0.0	0.0	15.0000	0.0
3 AKA693	0.0	20.0000	150.0000	70.0000	0.0	0.0	0.0	70.0000	0.0
4/0 AKA214	0.0	20.0000	150.0000	70.0000	0.0	0.0	30.0000	10.0000	0.0
1 AKA063	0.0	50.0000	150.0000	70.0000	0.0	0.0	15.0000	20.0000	0.0
2 AKA064	0.0	30.0000	150.0000	70.0000	0.0	0.0	70.0000	10.0000	0.0
3 AKA065	0.0	70.0000	150.0000	100.0000	0.0	0.0	30.0000	10.0000	0.0
Y AKA066	0.0	30.0000	150.0000	70.0000	0.0	0.0	50.0000	10.0000	0.0
5 AKA213	0.0	30.0000	300.0000	150.0000	0.0	0.0	0.0	10.0000	0.0
LAKA694	0.0	30.0000	300.0000	100.0000	0.0	0.0	0.0	10.0000	0.0
7 AKA695	0.0	30.0000	300.0000	150.0000	0.0	0.0	0.0	10.0000	0.0
8 AKA696	0.0	20.0000	150.0000	100.0000	0.0	0.0	0.0	10.0000	0.0
9 AKA697	0.0	30.0000	300.0000	150.0000	0.0	0.0	0.0	10.0000	0.0
4/0 AKA128	0.0	20.0000	150.0000	30.0000	0.0	0.0	0.0	10.0000	0.0
1 AKA212	0.0	30.0000	150.0000	100.0000	0.0	0.0	0.0	10.0000	0.0
2 AKA067	0.0	30.0000	150.0000	100.0000	0.0	0.0	7.00000	15.0000	0.0
3 AKA068	0.0	30.0000	150.0000	100.0000	0.0	0.0	15.0000	15.0000	0.0
Y AKA069	0.0	20.0000	70.0000	50.0000	0.0	0.0	0.0	10.0000	0.0
SAKA070	0.0	30.0000	150.0000	70.0000	0.0	0.0	0.0	10.0000	0.0
6 AKA071	0.0	15.0000	150.0000	70.0000	0.0	0.0	0.0	10.0000	0.0
7 AKA072	0.0	20.0000	150.0000	70.0000	0.0	0.0	0.0	10.0000	0.0
8 AKA073	0.0	7.0000	150.0000	10.0000	0.0	0.0	0.0	0.0	L
Y AKA074	0.0	15.0000	150.0000	15.0000	0.0	0.0	0.0	10.0000	0.0
SAKA075	0.0	20.0000	150.0000	50.0000	0.0	0.0	5.0000	20.0000	0.0
4/0 AKA076	0.0	10.0000	200.0000	15.0000	0.0	0.0	0.0	10.0000	0.0
1 AKA075	0.0	30.0000	150.0000	100.0000	0.0	0.0	20.0000	10.0000	0.0
ZAKA336	0.0	30.0000	150.0000	70.0000	0.0	0.0	0.0	10.0000	0.0
3 AKA335	0.0	20.0000	150.0000	70.0000	0.0	0.0	0.0	10.0000	0.0
Y AKA334	0.0	0.0	20.0000	150.0000	0.0	0.0	0.0	10.0000	0.0
SAKA333	0.0	0.0	20.0000	150.0000	0.0	0.0	0.0	10.0000	0.0
6 AKA332	0.0	20.0000	150.0000	70.0000	0.0	0.0	0.0	10.0000	0.0
7 AKA331	30.0000	20.0000	150.0000	70.0000	0.0	0.0	0.0	10.0000	0.0
8 AKA330	0.0	30.0000	150.0000	100.0000	0.0	0.0	0.0	10.0000	0.0
9 AKA329	0.0	100.0000	30.0000	70.0000	0.0	0.0	5.0000	15.0000	0.0
4/0 AKA328	0.0	30.0000	150.0000	200.0000	0.0	0.0	0.0	70.0000	0.0

TABLE 1

SAMPLE	SC PPM	SN PPM	SR PPM	W PPM	Y PPM	ZN PPM	AU PPM
46 / AKA079	15.0000	0.0	150.0000	15.0000	10.0000	0.0	0.0200
7 AKA080	15.0000	0.0	150.0000	150.0000	0.0	0.0	0.0600
3 AKA081	15.0000	0.0	150.0000	150.0000	0.0	0.0	0.0400
4 AKA220	10.0000	0.0	200.0000	70.0000	0.0	15.0000	0.0200
SAKA219	10.0000	0.0	200.0000	150.0000	0.0	10.0000	0.0200
6AKA221	10.0000	0.0	200.0000	100.0000	0.0	15.0000	0.0200
7AKA222	15.0000	0.0	200.0000	150.0000	0.0	15.0000	0.0200
5AKA223	10.0000	0.0	150.0000	100.0000	0.0	15.0000	0.0200
7AKA224	7.0000	0.0	150.0000	70.0000	0.0	15.0000	0.0200
4/6 AKA218	10.0000	0.0	150.0000	70.0000	0.0	10.0000	0.0200
/ AKA217	15.0000	0.0	200.0000	150.0000	0.0	15.0000	0.0200
2AKA216	10.0000	0.0	150.0000	100.0000	0.0	15.0000	0.0200
3AKA225	0.0	N	15.0000	0.0	15.0000	0.0	0.2000
4AKA215	15.0000	0.0	200.0000	70.0000	0.0	15.0000	0.0200
5AKA894	10.0000	0.0	200.0000	100.0000	0.0	15.0000	0.0200
6AKA893	15.0000	0.0	200.0000	150.0000	0.0	30.0000	0.0200
7AKA895	15.0000	0.0	300.0000	150.0000	0.0	20.0000	0.0200
8AKA896	15.0000	10.0000	300.0000	200.0000	0.0	20.0000	0.0200
5AKA693	15.0000	0.0	200.0000	150.0000	0.0	20.0000	0.0200
4/20 AKA214	15.0000	0.0	150.0000	100.0000	0.0	10.0000	0.0200
6 AKA063	20.0000	0.0	200.0000	300.0000	0.0	200.0000	0.0200
2AKA064	15.0000	0.0	100.0000	150.0000	0.0	10.0000	0.0200
3AKA065	15.0000	0.0	100.0000	150.0000	0.0	15.0000	0.0200
4AKA066	15.0000	0.0	200.0000	200.0000	0.0	15.0000	0.0200
5AKA213	15.0000	0.0	150.0000	150.0000	0.0	15.0000	0.0200
6 AKA694	15.0000	0.0	300.0000	200.0000	0.0	20.0000	0.0200
7AKA695	20.0000	0.0	300.0000	200.0000	0.0	15.0000	0.0200
8AKA696	15.0000	0.0	300.0000	150.0000	0.0	15.0000	0.0200
9AKA697	20.0000	0.0	200.0000	200.0000	0.0	20.0000	0.0200
4/30 AKA128	15.0000	0.0	150.0000	150.0000	0.0	20.0000	0.0200
15 AKA222	15.0000	0.0	150.0000	150.0000	0.0	10.0000	0.0200
2AKA067	15.0000	0.0	150.0000	200.0000	0.0	15.0000	0.0200
3AKA068	15.0000	0.0	150.0000	200.0000	0.0	15.0000	0.0200
4AKA069	10.0000	0.0	0.0	150.0000	0.0	10.0000	0.0200
5AKA070	15.0000	0.0	200.0000	200.0000	0.0	30.0000	0.0200
6 AKA071	15.0000	0.0	100.0000	200.0000	0.0	30.0000	0.0200
7AKA072	15.0000	0.0	150.0000	200.0000	0.0	20.0000	0.0200
8AKA073	10.0000	0.0	200.0000	100.0000	0.0	10.0000	0.0200
7AKA074	15.0000	0.0	300.0000	150.0000	0.0	20.0000	0.0200
4/9 AKA076	15.0000	0.0	150.0000	300.0000	0.0	15.0000	0.0200
15 AKA075	15.0000	0.0	200.0000	150.0000	0.0	10.0000	0.0200
2AKA336	15.0000	0.0	150.0000	200.0000	0.0	20.0000	0.0200
3AKA335	15.0000	0.0	150.0000	200.0000	0.0	10.0000	0.0200
4AKA334	15.0000	0.0	150.0000	200.0000	0.0	15.0000	0.0200
5AKA333	15.0000	0.0	150.0000	300.0000	0.0	10.0000	0.0200
6AKA332	20.0000	0.0	300.0000	200.0000	0.0	30.0000	0.0200
7AKA331	15.0000	0.0	300.0000	300.0000	0.0	15.0000	0.0200
8AKA330	20.0000	0.0	150.0000	200.0000	0.0	15.0000	0.0200
7AKA329	30.0000	0.0	700.0000	500.0000	0.0	70.0000	0.3000
4/50 AKA328	20.0000	0.0	300.0000	300.0000	0.0	150.0000	0.2000

TABLE 1

SAMPLE	FE PCT	MG PCT	CA PCT	MN PPM	AG PPM	AS PPM	BA PPM	BE PPM
45/ AKA327	20.0000	2.0000	1.5000	5000.0000	1.0000	0.0	0.0000	1.0000
2 AKA325	10.0000	0.5000	0.7000	1.0000	1500.0000	0.0	N	700.0000
3 AKA326	15.0000	0.7000	0.3000	0.7000	5000.0000	0.0	N	1.0000
4 AKA211	15.0000	7.0000	3.0000	0.7000	2000.0000	0.0	L	1.5000
5 AKI520	15.0000	7.0000	2.0000	0.7000	1500.0000	0.0	L	0.0
6 AKI519	15.0000	5.0000	5.0000	0.7000	1500.0000	0.0	L	0.0
7 AKA127	10.0000	2.0000	1.5000	0.7000	1500.0000	0.0	L	0.0
8 AKA816	5.0000	1.5000	1.0000	1.0000	1500.0000	0.0	L	1.5000
9 AKA815	10.0000	1.5000	1.0000	0.5000	2000.0000	1.0000	N	1.0000
46/ AKA813	5.0000	1.0000	1.0000	0.3000	1500.0000	0.0	L	1.5000
7 AKA814	5.0000	1.0000	1.0000	0.3000	1500.0000	0.0	L	1.5000
2 AKA811	0.3000	0.7000	1.0000	0.3000	1500.0000	0.0	N	1.5000
3 AKA812	0.3000	1.0000	1.0000	0.3000	1500.0000	0.0	L	1.0000
YAKA807	5.0000	1.5000	1.5000	0.5000	2000.0000	0.0	L	1.5000
5 AKA808	10.0000	1.5000	1.5000	0.7000	2000.0000	0.0	N	1.5000
6 AKA809	15.0000	1.0000	1.0000	0.7000	2000.0000	0.0	N	1.0000
7 AKA810	1.5000	0.7000	1.0000	0.7000	1500.0000	0.0	N	1.0000
8 AKA210	3.0000	0.7000	0.7000	0.2000	700.0000	0.0	N	0.0
9 AKA209	5.0000	1.5000	0.7000	0.5000	500.0000	0.0	N	1.0000
47/ AKA126	3.0000	0.3000	0.7000	0.2000	1500.0000	0.0	L	1.5000
1 AKA806	15.0000	2.0000	1.0000	1.0000	1500.0000	0.0	N	1.0000
2 AKA208	3.0000	0.5000	0.7000	0.2000	1000.0000	0.0	N	3.0000
3 AKA125	7.0000	0.7000	0.7000	0.3000	1000.0000	0.0	N	1.0000
4 AKA805	2.0000	0.3000	0.5000	0.2000	700.0000	0.0	N	1.0000
5 AKA804	3.0000	0.3000	0.5000	0.2000	500.0000	0.0	N	1.0000
6 AKA207	3.0000	0.3000	0.7000	0.2000	500.0000	0.0	N	1.0000
7 AKA124	3.0000	0.3000	0.7000	0.2000	700.0000	0.0	N	1.0000
8 AKA206	0.7000	0.1500	0.3000	1.0000	300.0000	0.0	N	1.0000
9 AKA255	3.0000	0.3000	0.5000	0.2000	700.0000	0.0	N	1.0000
48/ AKA254	5.0000	0.5000	0.7000	0.2000	700.0000	0.0	N	1.0000
1 AKI034	3.0000	1.0000	1.5000	0.3000	1500.0000	0.0	N	1.0000
2 AKA1032	3.0000	0.7000	0.7000	0.2000	1000.0000	0.0	N	1.0000
3 AKA1031	3.0000	1.0000	1.0000	0.5000	1500.0000	0.0	N	1.0000
4 AKA1030	3.0000	1.0000	1.5000	0.5000	1000.0000	1.5000	N	1.0000
5 AKA1033	3.0000	1.0000	0.7000	0.3000	1500.0000	0.0	L	1.0000
6 AKA1029	3.0000	1.0000	1.5000	0.7000	3000.0000	0.5000	N	1.0000
7 AKA1028	3.0000	1.0000	1.5000	0.7000	3000.0000	1.5000	N	1.0000
8 AKA1027	20.0000	0.7000	0.1500	0.5000	3000.0000	0.5000	N	1.0000
9 AKA1009	3.0000	1.0000	1.0000	0.3000	700.0000	0.0	N	1.0000
49/ AK1004	10.0000	1.5000	0.7000	0.3000	3000.0000	0.5000	N	1.0000
1 ZAK1003	5.0000	1.0000	1.0000	0.3000	1500.0000	1.0000	N	1.0000
2 JAK1012	20.0000	2.0000	3.0000	0.5000	3000.0000	7.00000	L	20.0000
3 JAK1010	3.0000	1.5000	1.5000	0.5000	1000.0000	0.0	N	30.0000
4 JAK1009	3.0000	1.0000	1.0000	0.3000	1500.0000	0.0	N	10.0000
5 JAK1004	10.0000	1.5000	1.0000	0.3000	3000.0000	0.5000	N	1.0000
6 ZAK1003	5.0000	2.0000	3.0000	0.5000	3000.0000	1.5000	N	3.0000
7 JAK1484	15.0000	1.0000	1.0000	0.3000	3000.0000	3.0000	L	20.0000
8 JAK1486	7.0000	1.0000	2.0000	0.5000	1500.0000	1.5000	N	5.0000
9 JAK1483	15.0000	2.0000	2.0000	0.5000	3000.0000	1.5000	N	1.0000
50/ JAK1005	7.0000	1.5000	1.0000	0.3000	3000.0000	1.5000	N	3.0000
6 JAK1482	15.0000	2.0000	3.0000	0.5000	2000.0000	1.5000	L	15.0000
7 JAK1487	15.0000	1.0000	1.0000	0.3000	1000.0000	1.5000	N	30.0000
8 JAK1488	20.0000	1.0000	0.7000	0.3000	2000.0000	5.0000	N	20.0000
9 JAK1489	15.0000	1.0000	1.0000	0.3000	2000.0000	7.00000	N	30.0000
500/ JAK1469	15.0000	1.0000	1.0000	0.5000	2000.0000	3.0000	N	7.00000

TABLE I

SAMPLE	BI PPM	CO PPM	CU PPM	LA PPM	NB PPM	NI PPM	PB PPM	SB PPM
45 / AKA327	0.0	100.0000	300.0000	0.0	10.0000	100.0000	70.0000	0.0
2 AKA325	0.0	30.0000	150.0000	70.0000	0.0	10.0000	70.0000	30.0000
3 AKA326	0.0	70.0000	150.0000	100.0000	0.0	10.0000	150.0000	30.0000
4 AKA211	0.0	70.0000	150.0000	150.0000	0.0	10.0000	150.0000	20.0000
SAK1520	0.0	70.0000	300.0000	150.0000	0.0	10.0000	150.0000	20.0000
6 AKA1519	0.0	50.0000	300.0000	150.0000	0.0	10.0000	150.0000	20.0000
7 AKA127	0.0	10.0000	150.0000	50.0000	0.0	10.0000	100.0000	100.0000
8 AKA816	0.0	15.0000	150.0000	50.0000	0.0	10.0000	70.0000	20.0000
PAKA815	0.0	30.0000	150.0000	150.0000	0.0	10.0000	50.0000	50.0000
46 / AKA813	0.0	10.0000	50.0000	10.0000	10.0000	10.0000	70.0000	0.0
/ AKA814	0.0	10.0000	30.0000	30.0000	0.0	10.0000	20.0000	100.0000
ZAKA811	0.0	10.0000	15.0000	50.0000	0.0	10.0000	70.0000	0.0
3 AKA812	0.0	5.0000	30.0000	10.0000	0.0	10.0000	15.0000	15.0000
ZAKA807	0.0	10.0000	30.0000	15.0000	30.0000	0.0	10.0000	70.0000
5 AKA808	0.0	20.0000	150.0000	150.0000	0.0	10.0000	100.0000	20.0000
6 AKA809	0.0	30.0000	150.0000	100.0000	0.0	10.0000	100.0000	15.0000
7 AKA810	0.0	0.0	N	10.0000	0.0	0.0	L	0.0
PAKA210	0.0	0.0	L	100.0000	7.0000	0.0	L	10.0000
ZAKA209	0.0	7.0000	150.0000	10.0000	0.0	0.0	N	20.0000
PAKA207	0.0	15.0000	0.0	5.0000	0.0	0.0	L	0.0
47 / AKA126	0.0	30.0000	150.0000	70.0000	20.0000	0.0	L	30.0000
/ AKA806	0.0	0.0	N	0.0	0.0	0.0	L	100.0000
ZAKA208	0.0	0.0	N	0.0	0.0	0.0	N	30.0000
3 AKA125	0.0	0.0	N	15.0000	10.0000	0.0	N	30.0000
ZAKA804	0.0	0.0	N	10.0000	0.0	0.0	N	10.0000
6 AKA207	0.0	0.0	N	10.0000	0.0	0.0	N	20.0000
7 AKA124	0.0	0.0	L	0.0	30.0000	0.0	N	70.0000
ZAKA206	0.0	0.0	N	0.0	5.0000	0.0	N	30.0000
8 AKA206	0.0	0.0	N	0.0	5.0000	0.0	N	30.0000
ZAKA255	0.0	0.0	N	0.0	10.0000	0.0	N	100.0000
48 / AKA254	0.0	0.0	N	0.0	30.0000	0.0	L	0.0
5 AKA1034	0.0	15.0000	50.0000	70.0000	0.0	10.0000	30.0000	30.0000
2 AKA1032	0.0	10.0000	70.0000	30.0000	0.0	10.0000	30.0000	30.0000
3 AKA1031	0.0	15.0000	100.0000	30.0000	0.0	10.0000	30.0000	70.0000
ZAKA1030	0.0	15.0000	50.0000	30.0000	0.0	10.0000	30.0000	70.0000
5 AKA1033	0.0	15.0000	70.0000	20.0000	0.0	0.0	N	30.0000
4 AKA1029	0.0	10.0000	30.0000	15.0000	0.0	10.0000	15.0000	30.0000
7 AKA1028	0.0	10.0000	30.0000	20.0000	0.0	10.0000	15.0000	150.0000
5 AKA1012	0.0	10.0000	15.0000	70.0000	0.0	10.0000	5.0000	300.0000
ZAKA1010	0.0	10.0000	20.0000	15.0000	0.0	10.0000	10.0000	15.0000
5 AKA1009	0.0	5.0000	10.0000	20.0000	0.0	0.0	L	20.0000
49 / AKA1004	0.0	30.0000	70.0000	100.0000	0.0	10.0000	150.0000	100.0000
2 AKA1003	0.0	5.0000	15.0000	50.0000	0.0	0.0	L	300.0000
3 AKA1484	0.0	70.0000	15.0000	150.0000	0.0	10.0000	50.0000	200.0000
ZAKA1467	0.0	20.0000	15.0000	200.0000	10.0000	10.0000	15.0000	300.0000
7 AKA1468	0.0	20.0000	150.0000	500.0000	20.0000	15.0000	50.0000	1000.0000
50 / AKA1469	0.0	30.0000	50.0000	300.0000	30.0000	15.0000	50.0000	1000.0000

TABLE 1

SAMPLE	SC PPM	V PPM	Y PPM	ZR PPM	AU PPM
45 / AKI327	30.0000	300.0000	30.0000	150.0000	0.0600
2 AKA325	15.0000	100.0000	0.0	200.0000	0.0400
3 AKA326	15.0000	0.0	300.0000	15.0000	0.0200L
4 AKA211	30.0000	0.0	150.0000	30.0000	0.0200L
5 AKI520	15.0000	0.0	300.0000	15.0000	0.0200L
6 AKI519	15.0000	0.0	300.0000	20.0000	0.0200L
7 AKAL27	10.0000	200.0000	100.0000	0.0	0.0200L
8 AKA816	10.0000	0.0	150.0000	20.0000	0.0200L
9 AKA815	15.0000	0.0	150.0000	0.0	0.0200L
46 o AKA813	7.0000	200.0000	100.0000	50.0000	0.0200L
/ AKA814	7.0000	300.0000	100.0000	15.0000	0.0200L
2 AKA811	5.0000	0.0	300.0000	30.0000	0.0200L
3 AKA812	7.0000	0.0	200.0000	100.0000	0.0200L
4 AKA807	10.0000	0.0	300.0000	150.0000	0.0200L
5 AKA808	20.0000	0.0	300.0000	20.0000	0.0200L
6 AKA809	15.0000	0.0	200.0000	20.0000	0.0200L
7 AKA810	5.0000	0.0	200.0000	15.0000	0.0200L
8 AKA210	7.0000	0.0	30.0000	10.0000	0.0200L
9 AKA209	15.0000	0.0	70.0000	10.0000	0.0200L
47 o AKAL26	0.0	0.0	300.0000	30.0000	0.0600
/ AKA806	30.0000	0.0	200.0000	20.0000	0.0200L
2 AKA208	5.0000	0.0	150.0000	20.0000	0.0200L
3 AKAL25	10.0000	0.0	150.0000	50.0000	0.0200L
4 AKA805	5.0000	0.0	150.0000	20.0000	0.0200L
5 AKA804	0.0	0.0	100.0000	20.0000	0.0200L
6 AKA207	5.0000	0.0	100.0000	20.0000	0.0200L
7 AKAL24	5.0000	0.0	150.0000	20.0000	0.0200L
8 AKA206	0.0	N	0.0	15.0000	0.0200L
9 AKA205	5.0000	0.0	100.0000	30.0000	0.0200L
48 o AKA254	5.0000	0.0	150.0000	30.0000	0.0200L
/ AKI034	10.0000	0.0	300.0000	100.0000	0.0200L
2 AKI032	10.0000	0.0	100.0000	15.0000	0.0200L
3 AKI031	10.0000	0.0	150.0000	15.0000	0.0200L
4 AKI030	15.0000	0.0	300.0000	100.0000	0.0200L
5 AKI033	10.0000	0.0	150.0000	100.0000	0.0200L
6 AKI029	10.0000	0.0	150.0000	15.0000	0.0200L
7 AKI028	10.0000	0.0	150.0000	100.0000	0.0200L
8 AKI032	15.0000	0.0	150.0000	200.0000	0.0200L
9 AKI031	15.0000	0.0	150.0000	200.0000	0.0200L
49 o AKI009	10.0000	0.0	150.0000	100.0000	0.0200L
/ AKI004	15.0000	0.0	100.0000	150.0000	0.0400
2 AKI003	15.0000	0.0	200.0000	100.0000	0.0200L
3 AKI012	15.0000	0.0	300.0000	200.0000	0.0200L
4 AKI010	15.0000	0.0	300.0000	150.0000	0.0200L
5 AKI009	10.0000	0.0	150.0000	100.0000	0.0400
6 AKI005	15.0000	70.0000	200.0000	70.0000	100.0000
7 AKI482	15.0000	0.0	70.0000	200.0000	0.0200L
8 AKI467	10.0000	30.0000	100.0000	70.0000	200.0000
9 AKI468	15.0000	70.0000	100.0000	150.0000	200.0000
56 o AKI469	15.0000	100.0000	200.0000	150.0000	100.0000

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TABLE 1

SAMPLE	FE PCT	MG PCT	CA PCT	MN PPM	AS PPM	BA PPM	BE PPM
So/ AKI470	10.0000	1.0000	1.5000	0.3000	2000.0000	300.0000	10.0000
2 AKI471	10.0000	1.0000	1.0000	0.3000	3000.0000	300.0000	10.0000
3 AKI472	15.0000	1.5000	0.7000	0.5000	1500.0000	150.0000	5.0000
YAKI006	3.0000	1.5000	0.7000	0.3000	1000.0000	1.0000	7.0000
SAKI473	15.0000	3.0000	2.0000	0.5000	1500.0000	0.5000	3.0000
6 AKI474	10.0000	1.5000	1.5000	0.5000	2000.0000	3.0000	7.0000
7 AKI475	15.0000	3.0000	5.0000	0.7000	2000.0000	0.0	20.0000
8 AKI007	3.0000	1.0000	0.7000	0.3000	1500.0000	0.0	15.0000
7 AKI476	15.0000	2.0000	3.0000	0.7000	3000.0000	3.0000	10.0000
S/0 AKI477	15.0000	2.0000	2.0000	0.7000	3000.0000	5.0000	15.0000
/AKI478	20.0000	1.0000	1.0000	0.5000	1500.0000	3.0000	1.5000
2 AKI479	15.0000	1.5000	1.5000	0.7000	2000.0000	7.0000	20.0000
3 AKI008	5.0000	1.0000	0.7000	0.5000	3000.0000	0.0	3.0000
YAKI011	3.0000	1.0000	0.7000	0.3000	1000.0000	1.5000	1.0000
SAKI481	15.0000	2.0000	3.0000	0.7000	1500.0000	2.0000	70.0000
6 AKI480	15.0000	2.0000	2.0000	0.7000	2000.0000	1.5000	100.0000
7 AKI013	10.0000	1.5000	1.5000	0.7000	1500.0000	0.7000	0.0
8 AKI014	5.0000	1.0000	0.7000	0.5000	3000.0000	0.0	3.0000
SAK1015	5.0000	1.5000	1.0000	0.3000	1000.0000	1.5000	1.0000
S/0 AKI016	7.0000	1.5000	1.0000	0.5000	1000.0000	0.0	1.5000
/AKI017	3.0000	1.5000	0.7000	0.3000	1000.0000	5.0000	2.0000
2 AKI021	7.0000	1.5000	1.0000	0.5000	1000.0000	0.5000	0.0
3 AKI022	3.0000	1.5000	1.0000	0.5000	1500.0000	0.7000	0.0
YAKI018	5.0000	2.0000	2.0000	0.5000	1000.0000	0.7000	0.0
SAK1019	10.0000	3.0000	1.5000	0.7000	1000.0000	0.7000	0.0
6 AKI020	10.0000	1.0000	1.5000	0.7000	1500.0000	3.0000	3.0000
7 AKI026	3.0000	1.5000	0.7000	0.3000	700.0000	1.5000	0.0
8 AKI023	3.0000	1.0000	1.0000	0.7000	1000.0000	1.5000	20.0000
PAK1024	5.0000	1.5000	1.5000	0.7000	1500.0000	1.5000	30.0000
S/0 AKI025	3.0000	1.0000	1.0000	0.3000	700.0000	0.5000	15.0000
/AKI027	7.0000	1.5000	1.0000	0.3000	1000.0000	0.0	20.0000
2 AKAT48	3.0000	1.0000	1.0000	0.7000	700.0000	0.5000	0.0
3 AKAT42	3.0000	1.5000	1.5000	0.7000	500.0000	0.3000	0.0
YAKA741	7.0000	1.5000	1.5000	0.5000	1500.0000	0.0	10.0000
SAKA678	3.0000	0.7000	0.7000	0.3000	700.0000	0.0	15.0000
6 AKA676	3.0000	0.5000	0.7000	0.3000	1500.0000	0.7000	20.0000
7 AKA677	3.0000	1.0000	1.0000	0.7000	700.0000	0.5000	10.0000
8 AKA679	5.0000	1.0000	1.5000	0.7000	500.0000	0.3000	10.0000
9 AKA680	5.0000	1.0000	1.5000	0.5000	1000.0000	1.0000	10.0000
S/0 AKA674	10.0000	1.5000	1.5000	0.5000	700.0000	0.7000	0.0
/AKA675	5.0000	1.0000	1.0000	0.7000	700.0000	1.0000	10.0000
2 AKA672	3.0000	0.7000	0.7000	0.7000	500.0000	0.3000	0.0
3 AKA670	3.0000	1.0000	1.0000	0.7000	700.0000	0.5000	10.0000
YAKA671	7.0000	1.5000	1.5000	0.5000	1000.0000	0.0	10.0000
SAKA673	3.0000	0.7000	0.5000	0.3000	300.0000	0.0	10.0000
6 AKA668	3.0000	0.7000	0.7000	0.5000	500.0000	1.0000	20.0000
7 AKA667	7.0000	1.0000	1.5000	0.5000	1000.0000	1.0000	1.5000
8 AKA666	5.0000	1.0000	1.5000	0.5000	700.0000	0.0	300.0000
YAKA669	3.0000	0.7000	0.7000	0.3000	500.0000	0.0	20.0000
S/0 AKA665	3.0000	0.7000	0.5000	0.3000	1000.0000	0.0	1.5000

TABLE 1

SAMPLE	BI PPM	CO PPM	CR PPM	CU PPM	LA PPM	NB PPM	NI PPM	PB PPM	SB PPM
50/AK1470	0.0	20.0000	15.0000	50.0000	70.0000	15.0000	15.0000	700.0000	0.0
1AK1471	0.0	20.0000	15.0000	200.0000	30.0000	20.0000	15.0000	700.0000	0.0
3AK1472	0.0	30.0000	30.0000	100.0000	20.0000	5.0000	15.0000	700.0000	0.0
4AK1476	0.0	10.0000	20.0000	70.0000	0.0	0.0	10.0000	10.0000	300.0000
510AK1477	0.0	50.0000	50.0000	70.0000	0.0	0.0	10.0000	50.0000	150.0000
5AK1473	0.0	20.0000	15.0000	150.0000	30.0000	15.0000	15.0000	1000.0000	0.0
6AK1474	0.0	50.0000	50.0000	150.0000	20.0000	5.0000	10.0000	1000.0000	0.0
7AK1475	0.0	20.0000	30.0000	150.0000	0.0	0.0	10.0000	700.0000	0.0
8AK1007	0.0	20.0000	30.0000	150.0000	0.0	0.0	10.0000	30.0000	700.0000
9AK1011	0.0	30.0000	50.0000	150.0000	50.0000	10.0000	15.0000	30.0000	500.0000
520AK1478	0.0	30.0000	30.0000	200.0000	70.0000	10.0000	15.0000	30.0000	1500.0000
1AK1479	0.0	30.0000	50.0000	150.0000	0.0	0.0	10.0000	1000.0000	0.0
3AK1008	0.0	30.0000	50.0000	200.0000	0.0	0.0	10.0000	500.0000	0.0
YAK1015	0.0	15.0000	50.0000	300.0000	0.0	0.0	10.0000	150.0000	0.0
SAK1481	0.0	30.0000	70.0000	300.0000	0.0	0.0	10.0000	50.0000	0.0
6AK1480	0.0	50.0000	150.0000	200.0000	0.0	0.0	10.0000	100.0000	0.0
7AK1013	0.0	20.0000	30.0000	200.0000	0.0	0.0	10.0000	15.0000	70.0000
8AK1014	0.0	20.0000	150.0000	30.0000	0.0	0.0	10.0000	30.0000	10.0000
9AK1015	0.0	20.0000	100.0000	70.0000	0.0	0.0	10.0000	30.0000	70.0000
520AK1016	0.0	20.0000	100.0000	50.0000	0.0	0.0	10.0000	30.0000	70.0000
1AK1017	0.0	20.0000	30.0000	50.0000	0.0	0.0	10.0000	15.0000	150.0000
2AK1021	0.0	20.0000	150.0000	70.0000	0.0	0.0	10.0000	30.0000	50.0000
3AK1022	0.0	15.0000	70.0000	30.0000	0.0	0.0	10.0000	30.0000	200.0000
YAK1018	0.0	20.0000	50.0000	70.0000	0.0	0.0	10.0000	30.0000	50.0000
SAK1019	0.0	30.0000	100.0000	70.0000	0.0	0.0	10.0000	50.0000	50.0000
6AK1020	0.0	20.0000	70.0000	150.0000	70.0000	0.0	0.0	20.0000	150.0000
7AK1026	0.0	10.0000	70.0000	30.0000	0.0	0.0	10.0000	30.0000	100.0000
8AK1023	0.0	20.0000	70.0000	70.0000	0.0	0.0	10.0000	70.0000	200.0000
9AK1024	0.0	20.0000	70.0000	50.0000	0.0	0.0	10.0000	50.0000	150.0000
530AK1025	0.0	15.0000	50.0000	30.0000	0.0	0.0	10.0000	30.0000	50.0000
1AK1027	0.0	20.0000	70.0000	70.0000	0.0	0.0	10.0000	70.0000	70.0000
2AKA748	0.0	20.0000	30.0000	30.0000	50.0000	0.0	0.0	30.0000	0.0
3AKA742	0.0	7.0000	30.0000	15.0000	0.0	0.0	10.0000	15.0000	70.0000
4AKA741	0.0	15.0000	30.0000	30.0000	20.0000	0.0	0.0	30.0000	50.0000
5AKA678	0.0	5.0000	30.0000	30.0000	0.0	0.0	10.0000	30.0000	15.0000
6AKA676	0.0	5.0000	15.0000	50.0000	20.0000	0.0	0.0	10.0000	15.0000
7AKA677	0.0	7.0000	70.0000	30.0000	0.0	0.0	10.0000	30.0000	20.0000
8AKA679	0.0	10.0000	30.0000	70.0000	0.0	0.0	10.0000	20.0000	70.0000
9AKA680	0.0	10.0000	15.0000	50.0000	0.0	0.0	10.0000	20.0000	150.0000
546AKA674	0.0	20.0000	30.0000	100.0000	0.0	0.0	10.0000	30.0000	70.0000
5AKA675	0.0	5.0000	30.0000	70.0000	0.0	0.0	10.0000	30.0000	100.0000
ZAKA672	0.0	5.0000	15.0000	7.00000	0.0	0.0	10.0000	15.0000	30.0000
3AKA670	0.0	10.0000	20.0000	15.0000	0.0	0.0	10.0000	15.0000	20.0000
YAKA671	0.0	20.0000	50.0000	30.0000	20.0000	5.0000	0.0	20.0000	70.0000
5AKA673	0.0	5.0000	150.0000	7.00000	0.0	0.0	10.0000	20.0000	10.0000
LAKA668	0.0	7.0000	30.0000	15.0000	0.0	0.0	10.0000	20.0000	30.0000
7AKA667	0.0	15.0000	50.0000	50.0000	30.0000	0.0	0.0	30.0000	150.0000
8AKA666	0.0	15.0000	30.0000	30.0000	0.0	0.0	10.0000	15.0000	70.0000
9AKA669	0.0	15.0000	70.0000	30.0000	0.0	0.0	10.0000	30.0000	10.0000
550AKA665	0.0	10.0000	30.0000	10.0000	0.0	0.0	10.0000	15.0000	70.0000

TABLE I

SAMPLE	SC PPM	SN PPM	SR PPM	V PPM	W PPM	X PPM	Y PPM	ZP PPM	AU PPM
									ZR PPM
56/ AKI470	10.0000	20.0000	200.0000	100.0000	0.0	N	100.0000	100.0000	0.02000L
2AKI471	7.0000	200.0000	70.0000	0.0	N	150.0000	100.0000	150.0000	0.02000L
3AKI472	15.0000	30.0000	150.0000	100.0000	0.0	N	70.0000	70.0000	0.02000L
YAKI006	10.0000	70.0000	150.0000	100.0000	0.0	N	20.0000	70.0000	0.02000L
SAKI473	20.0000	0.0	L	700.0000	200.0000	0.0	30.0000	700.0000	0.02000L
6AKI474	15.0000	30.0000	300.0000	150.0000	0.0	N	70.0000	100.0000	0.02000L
7AKI475	15.0000	0.0	L	700.0000	200.0000	0.0	20.0000	100.0000	0.02000L
FAKI007	10.0000	30.0000	300.0000	150.0000	0.0	N	70.0000	100.0000	0.02000L
7AKI476	15.0000	30.0000	500.0000	200.0000	0.0	N	100.0000	200.0000	0.02000L
5/ AKI477	15.0000	50.0000	300.0000	200.0000	0.0	N	100.0000	300.0000	0.02000L
7AKI478	15.0000	30.0000	150.0000	150.0000	0.0	N	15.0000	700.0000	0.02000L
2AKI479	10.0000	30.0000	200.0000	150.0000	0.0	N	70.0000	300.0000	0.02000L
3AKI008	15.0000	30.0000	150.0000	150.0000	0.0	N	50.0000	150.0000	0.02000L
FAKI011	15.0000	0.0	L	100.0000	150.0000	0.0	15.0000	0.0	0.02000L
SAKI481	15.0000	0.0	N	300.0000	300.0000	0.0	30.0000	0.0	0.02000L
6AKI480	20.0000	0.0	N	300.0000	300.0000	0.0	30.0000	200.0000	0.02000L
7AKI013	15.0000	0.0	N	200.0000	300.0000	0.0	15.0000	300.0000	0.02000L
FAKI014	15.0000	0.0	N	200.0000	150.0000	0.0	15.0000	0.0	0.02000L
7AKI015	15.0000	0.0	N	200.0000	150.0000	0.0	15.0000	300.0000	0.02000L
5/2AKI016	15.0000	0.0	N	200.0000	200.0000	0.0	15.0000	200.0000	0.02000L
7AKI017	10.0000	0.0	L	200.0000	150.0000	0.0	15.0000	300.0000	0.02000L
2AKI021	15.0000	0.0	N	200.0000	200.0000	0.0	15.0000	0.0	0.02000L
3AKI022	15.0000	0.0	N	300.0000	150.0000	0.0	15.0000	700.0000	0.02000L
YAKI018	15.0000	0.0	N	500.0000	150.0000	0.0	15.0000	100.0000	0.02000L
SAKI019	15.0000	0.0	N	300.0000	200.0000	0.0	15.0000	0.0	0.02000L
4AKI020	15.0000	50.0000	300.0000	150.0000	0.0	N	70.0000	700.0000	0.02000L
7AKI026	10.0000	0.0	N	200.0000	150.0000	0.0	10.0000	0.0	0.02000L
FAKI023	15.0000	0.0	N	300.0000	150.0000	0.0	20.0000	300.0000	0.02000L
7AKI024	15.0000	0.0	N	300.0000	150.0000	0.0	15.0000	300.0000	0.02000L
53/2AKI025	15.0000	0.0	N	200.0000	150.0000	0.0	10.0000	0.0	0.02000L
7AKI027	15.0000	0.0	N	300.0000	200.0000	0.0	15.0000	300.0000	0.02000L
2AKA74	15.0000	0.0	N	300.0000	100.0000	0.0	15.0000	200.0000	0.02000L
3AKA742	15.0000	0.0	L	300.0000	70.0000	0.0	15.0000	0.0	0.02000L
YAKA741	15.0000	0.0	N	300.0000	200.0000	0.0	30.0000	0.0	0.02000L
SAKA678	7.0000	0.0	N	200.0000	100.0000	0.0	10.0000	0.0	0.02000L
6AKA676	10.0000	0.0	L	200.0000	100.0000	0.0	30.0000	0.0	0.02000L
7AKA677	10.0000	0.0	N	200.0000	150.0000	0.0	15.0000	0.0	0.02000L
8AKA679	10.0000	0.0	L	200.0000	150.0000	0.0	30.0000	200.0000	0.02000L
SAKA680	10.0000	10.0000	0.0	200.0000	150.0000	0.0	20.0000	200.0000	0.02000L
5/4AKA674	15.0000	15.0000	200.0000	150.0000	0.0	N	20.0000	150.0000	0.02000L
1AKA675	15.0000	10.0000	300.0000	150.0000	0.0	N	15.0000	100.0000	0.02000L
2AKA672	7.0000	0.0	N	150.0000	70.0000	0.0	15.0000	0.0	0.02000L
3AKA670	10.0000	0.0	L	150.0000	100.0000	0.0	20.0000	100.0000	0.02000L
YAKA671	20.0000	0.0	L	300.0000	200.0000	0.0	15.0000	200.0000	0.02000L
SAKA673	7.0000	0.0	N	150.0000	70.0000	0.0	10.0000	0.0	0.02000L
6AKA668	7.0000	0.0	L	150.0000	100.0000	0.0	20.0000	0.0	0.02000L
7AKA667	15.0000	10.0000	100.0000	150.0000	0.0	N	30.0000	100.0000	0.02000L
8AKA666	15.0000	0.0	L	200.0000	150.0000	0.0	15.0000	100.0000	0.02000L
9AKA669	10.0000	0.0	N	150.0000	150.0000	0.0	15.0000	150.0000	0.02000L
5/5AKA665	15.0000	10.0000	100.0000	150.0000	0.0	N	20.0000	150.0000	0.02000L

TABLE I

SAMPLE	FE PCT	CA PCT	MG PCT	Ti PCT	MN PPM	AG PPM	AS PPM	BA PPM	BE PPM
55 / AKA663	3.0000	0.7000	0.3000	0.3000	700.0000	10.0000	0.0	700.0000	1.5000
2 AKA661	10.0000	1.5000	1.5000	0.5000	1500.0000	3.0000	0.0	20.0000	1.5000
3 AKA662	10.0000	1.0000	1.5000	0.5000	2000.0000	1.5000	0.0	10.0000	5.0000
4 AKA660	3.0000	0.7000	0.5000	0.3000	1000.0000	0.0	0.0	700.0000	1.0000
5 AKA659	5.0000	0.7000	1.5000	0.3000	700.0000	0.0	0.0	700.0000	1.0000
6 AKA651	5.0000	1.0000	1.0000	0.3000	1000.0000	0.0	0.0	500.0000	1.0000
7 AKA658	10.0000	1.0000	1.5000	0.3000	1500.0000	0.0	0.0	700.0000	1.5000
8 AKA655	7.0000	0.7000	15.0000	0.3000	1000.0000	0.0	0.0	700.0000	1.0000
9 AKA652	7.0000	1.5000	0.5000	0.3000	700.0000	0.0	0.0	700.0000	0.0
56 AKA656	3.0000	0.7000	1.0000	0.3000	700.0000	0.0	0.0	700.0000	1.0000
1 AKA657	10.0000	1.0000	1.5000	0.5000	1500.0000	1.0000	0.0	10.0000	700.0000
2 AKA654	7.0000	0.7000	1.5000	0.5000	1000.0000	1.0000	0.0	700.0000	1.0000
3 AKA653	10.0000	1.5000	2.0000	0.3000	1000.0000	0.0	0.0	700.0000	0.0
Y AKA664	3.0000	0.7000	0.5000	0.3000	300.0000	0.0	0.0	700.0000	1.0000
S AKA650	3.0000	0.7000	0.3000	0.3000	500.0000	0.0	0.0	10.0000	1.5000
6 AKA682	3.0000	1.0000	1.5000	0.3000	700.0000	0.0	0.0	10.0000	2.0000
7 AKA681	3.0000	1.0000	1.5000	0.3000	700.0000	0.0	0.0	700.0000	1.0000
8 AKA683	7.0000	1.5000	1.5000	0.5000	1500.0000	0.0	0.0	700.0000	1.0000
9 AKA684	5.0000	1.0000	1.0000	0.5000	1500.0000	0.0	0.0	700.0000	1.0000
57 AKA685	10.0000	1.5000	1.5000	0.7000	1500.0000	0.5000	0.0	15.0000	700.0000
1 AKA686	10.0000	1.0000	1.0000	0.5000	1500.0000	1.5000	0.0	20.0000	700.0000
2 AKA691	5.0000	1.0000	1.0000	0.3000	1500.0000	0.0	0.0	700.0000	1.0000
3 AKA692	7.0000	1.0000	1.0000	0.3000	1500.0000	0.0	0.0	700.0000	1.0000
Y AKA689	7.0000	1.0000	0.7000	0.5000	1000.0000	0.0	0.0	10.0000	1.5000
S AKA688	3.0000	0.7000	0.5000	0.2000	700.0000	0.0	0.0	20.0000	700.0000
6 AKA690	2.0000	0.5000	0.3000	0.2000	700.0000	0.0	0.0	0.0	500.0000
7 AKA687	1.5000	0.7000	0.7000	0.2000	700.0000	0.0	0.0	0.0	500.0000
8 AKA353	5.0000	1.0000	0.7000	0.3000	1000.0000	0.0	0.0	10.0000	1.5000
9 AKA352	3.0000	0.7000	0.7000	0.3000	700.0000	0.0	0.0	0.0	500.0000
58 AKA351	7.0000	1.0000	1.0000	0.5000	1000.0000	0.5000	0.0	10.0000	1.5000
1 AKA649	3.0000	1.5000	1.5000	0.3000	1000.0000	1.5000	0.0	10.0000	3.0000
2 AKA350	7.0000	1.0000	1.5000	0.5000	1500.0000	1.5000	0.0	0.0	500.0000
3 AKA648	5.0000	1.0000	0.7000	0.3000	1000.0000	0.7000	0.0	15.0000	300.0000
Y AKA349	7.0000	1.0000	1.0000	0.3000	1000.0000	0.0	0.0	10.0000	1.5000
S AKA348	5.0000	1.0000	1.0000	0.3000	1500.0000	0.0	0.0	10.0000	500.0000
6 AKA647	3.0000	0.7000	1.5000	0.3000	1500.0000	0.5000	0.0	10.0000	200.0000
7 AKA347	3.0000	1.0000	1.0000	0.7000	2000.0000	0.0	0.0	0.0	700.0000
8 AKA346	3.0000	0.7000	0.7000	0.2000	300.0000	0.0	0.0	20.0000	500.0000
9 AKA345	5.0000	1.0000	1.0000	0.5000	1000.0000	0.7000	0.0	0.0	300.0000
59 AKA646	3.0000	0.7000	0.7000	0.3000	1500.0000	1.0000	0.0	0.0	300.0000
1 AKA344	5.0000	1.0000	1.5000	0.5000	2000.0000	0.7000	0.0	10.0000	500.0000
2 AKA644	3.0000	0.7000	1.0000	0.2000	700.0000	1.0000	0.0	0.0	300.0000
3 AKA645	3.0000	0.7000	0.7000	0.3000	1000.0000	0.0	0.0	0.0	1.5000
Y AKA643	3.0000	0.7000	0.7000	0.3000	700.0000	0.0	0.0	0.0	300.0000
S AKA642	3.0000	0.7000	0.7000	0.2000	700.0000	0.7000	0.0	0.0	300.0000
6 AKA343	3.0000	1.0000	1.5000	0.1000	2000.0000	0.7000	0.0	10.0000	700.0000
7 AKA342	15.0000	1.5000	0.7000	0.7000	1500.0000	0.0	0.0	0.0	1.5000
8 AKA341	3.0000	0.7000	0.7000	0.3000	700.0000	0.5000	0.0	0.0	500.0000
9 AKA339	5.0000	1.0000	1.0000	0.3000	1500.0000	1.0000	0.0	0.0	1.0000
60 AKA638	5.0000	0.7000	0.7000	0.3000	500.0000	0.0	0.0	20.0000	1.5000

TABLE 1

SAMPLE	BI PPM	CO PPM	CR PPM	CU PPM	LA PPM	NB PPM	NI PPM	PB PPM	SB PPM
551 AKA663	0.0	N	15.0000	7.0000	0.0 L	10.0000	10.0000	70.0000	0.0
2 AKA661	0.0	N	30.0000	70.0000	20.0000	10.0000	70.0000	300.0000	0.0
3 AKA662	0.0	N	15.0000	30.0000	70.0000	30.0000	20.0000	300.0000	0.0
4 AKA660	0.0	N	5.0000	15.0000	0.0 L	10.0000	10.0000	50.0000	0.0
5 AKA659	0.0	N	7.0000	10.0000	20.0000	0.0 L	10.0000	30.0000	0.0
6 AKA651	0.0	N	10.0000	10.0000	30.0000	0.0 L	10.0000	30.0000	0.0
7 AKA658	0.0	N	10.0000	30.0000	20.0000	50.0000	10.0000	150.0000	0.0
8 AKA655	0.0	N	15.0000	30.0000	20.0000	10.0000	10.0000	100.0000	0.0
7 AKA652	0.0	N	10.0000	20.0000	0.0 L	0.0 L	15.0000	50.0000	0.0
560 AKA656	0.0	N	5.0000	15.0000	7.0000	20.0000	10.0000	30.0000	0.0
6 AKA657	0.0	N	10.0000	30.0000	50.0000	20.0000	10.0000	150.0000	0.0
2 AKA654	0.0	N	7.0000	30.0000	50.0000	20.0000	10.0000	150.0000	0.0
3 AKA653	0.0	N	15.0000	10.0000	50.0000	30.0000	10.0000	10.0000	0.0
4 AKA664	0.0	N	10.0000	30.0000	15.0000	0.0 L	10.0000	30.0000	0.0
5 AKA650	0.0	N	7.0000	30.0000	30.0000	0.0 L	10.0000	30.0000	0.0
6 AKA682	0.0	N	7.0000	15.0000	20.0000	0.0 L	10.0000	20.0000	0.0
7 AKA681	0.0	N	7.0000	10.0000	20.0000	0.0 L	10.0000	15.0000	0.0
8 AKA683	0.0	N	10.0000	50.0000	30.0000	20.0000	10.0000	30.0000	0.0
7 AKA684	0.0	N	10.0000	30.0000	10.0000	0.0 L	10.0000	15.0000	0.0
570 AKA685	0.0	N	15.0000	100.0000	30.0000	20.0000	0.0 L	10.0000	30.0000
6 AKA686	0.0	N	20.0000	70.0000	50.0000	20.0000	5.0000	10.0000	15.0000
2 AKA691	0.0	N	15.0000	30.0000	20.0000	0.0 L	10.0000	30.0000	0.0
3 AKA692	0.0	N	15.0000	100.0000	30.0000	20.0000	10.0000	50.0000	0.0
Y AKA689	0.0	N	15.0000	100.0000	30.0000	0.0 L	10.0000	70.0000	0.0
J AKA688	0.0	N	7.0000	50.0000	10.0000	0.0 L	0.0 L	30.0000	0.0
L AKA690	0.0	N	5.0000	30.0000	7.00000	0.0 L	0.0 L	30.0000	0.0
7 AKA687	0.0	N	15.0000	20.0000	20.0000	0.0 L	10.0000	30.0000	0.0
8 AKA353	0.0	N	5.0000	70.0000	70.0000	0.0 L	10.0000	5.0000	0.0
7 AKA352	0.0	N	0.0 L	15.0000	50.0000	0.0 L	0.0 L	15.0000	0.0
590 AKA351	0.0	N	5.0000	50.0000	100.0000	0.0 L	10.0000	20.0000	0.0
6 AKA649	0.0	N	7.0000	10.0000	30.0000	30.0000	0.0 L	10.0000	15.0000
2 AKA350	0.0	N	7.0000	30.0000	70.0000	0.0 L	0.0 L	10.0000	0.0
3 AKA648	0.0	N	10.0000	15.0000	70.0000	50.0000	0.0 L	15.0000	0.0
4 AKA349	0.0	N	5.0000	30.0000	70.0000	0.0 L	0.0 L	10.0000	0.0
SAK3348	0.0	N	0.0 L	15.0000	70.0000	0.0 L	0.0 L	20.0000	0.0
C AKA647	0.0	N	7.0000	10.0000	70.0000	30.0000	0.0 L	10.0000	10.0000
7 AKA347	0.0	N	0.0 L	30.0000	70.0000	0.0 L	0.0 L	10.0000	0.0
8 AKA346	0.0	N	0.0 L	30.0000	50.0000	0.0 L	0.0 L	10.0000	0.0
9 AKA345	0.0	N	0.0 L	30.0000	70.0000	0.0 L	0.0 L	10.0000	0.0
590 AKA646	0.0	N	7.0000	10.0000	100.0000	0.0 L	0.0 L	10.0000	15.0000
6 AKA344	0.0	N	5.0000	15.0000	30.0000	30.0000	0.0 L	20.0000	7.0000
2 AKA644	0.0	N	0.0 L	0.0 L	20.0000	0.0 L	0.0 L	10.0000	0.0
3 AKA645	0.0	N	7.0000	0.0 L	15.0000	0.0 L	10.0000	15.0000	0.0
4 AKA643	0.0	N	0.0 L	0.0 L	15.0000	0.0 L	0.0 L	10.0000	0.0
5 AKA642	0.0	N	0.0 L	10.0000	20.0000	0.0 L	0.0 L	15.0000	0.0
2 AKA343	0.0	N	0.0 L	30.0000	150.0000	0.0 L	0.0 L	10.0000	5.0000
7 AKA342	0.0	N	7.0000	50.0000	70.0000	0.0 L	5.0000	10.0000	15.0000
8 AKA341	0.0	N	0.0 L	30.0000	70.0000	0.0 L	0.0 L	10.0000	70.0000
SAK339	0.0	N	5.0000	70.0000	50.0000	0.0 L	0.0 L	10.0000	15.0000
600 AKA638	0.0	N	5.0000	15.0000	70.0000	0.0 L	0.0 L	20.0000	30.0000

TABLE 1

SAMPLE	SC PPM	SN PPM	SR PPM	V PPM	Y PPM	ZN PPM	AU PPM
SS/AKA603	10.0000	0.0	150.0000	70.0000	20.0000	0.0	0.0200L
2/AKA661	20.0000	30.0000	200.0000	200.0000	0.0	70.0000	0.0200L
3/AKA662	15.0000	20.0000	300.0000	150.0000	150.0000	70.0000	0.0200L
4/AKA660	10.0000	0.0	L	150.0000	0.0	L	100.0000
SAKA659	15.0000	0.0	L	200.0000	0.0	L	150.0000
6/AKA651	10.0000	0.0	L	200.0000	150.0000	0.0	0.0200L
7/AKA658	30.0000	0.0	N	150.0000	50.0000	200.0000	100.0000
8/AKA655	15.0000	0.0	N	150.0000	30.0000	0.0	0.0200L
9/AKA652	15.0000	0.0	N	150.0000	20.0000	0.0	0.0200L
SAKA650	7.0000	0.0	N	150.0000	10.0000	0.0	0.0200L
6/DAKA656	15.0000	0.0	L	150.0000	50.0000	20.0000	150.0000
7/AKA657	15.0000	0.0	L	200.0000	150.0000	20.0000	100.0000
SAKA654	15.0000	0.0	N	200.0000	150.0000	50.0000	100.0000
9/AKA653	15.0000	0.0	N	200.0000	150.0000	30.0000	100.0000
Y/AKA664	7.0000	0.0	N	300.0000	100.0000	20.0000	100.0000
SAKA650	7.0000	0.0	N	150.0000	100.0000	10.0000	100.0000
6/AKA682	10.0000	15.0000	300.0000	150.0000	50.0000	200.0000	100.0000
7/AKA681	10.0000	0.0	N	300.0000	150.0000	20.0000	100.0000
8/AKA683	15.0000	0.0	N	300.0000	200.0000	0.0	70.0000
Y/AKA684	15.0000	0.0	N	300.0000	150.0000	20.0000	70.0000
SAKA688	7.0000	0.0	N	200.0000	200.0000	30.0000	100.0000
5/DAKA685	20.0000	0.0	N	200.0000	150.0000	30.0000	150.0000
7/AKA686	20.0000	0.0	N	200.0000	150.0000	30.0000	150.0000
SAKA691	15.0000	0.0	L	200.0000	150.0000	20.0000	100.0000
3/AKA692	15.0000	0.0	N	200.0000	150.0000	20.0000	70.0000
Y/AKA689	15.0000	0.0	N	200.0000	150.0000	20.0000	100.0000
SAKA688	7.0000	0.0	N	200.0000	70.0000	10.0000	200.0000
6/AKA690	5.0000	0.0	N	150.0000	50.0000	10.0000	70.0000
7/AKA687	5.0000	0.0	N	150.0000	50.0000	10.0000	150.0000
8/AKA353	10.0000	15.0000	150.0000	70.0000	30.0000	200.0000	500.0000
9/AKA352	7.0000	0.0	L	150.0000	70.0000	20.0000	100.0000
5/DAKA351	10.0000	15.0000	200.0000	100.0000	300.0000	200.0000	150.0000
7/AKA649	10.0000	10.0000	300.0000	100.0000	300.0000	300.0000	70.0000
15/AKA350	15.0000	0.0	L	300.0000	100.0000	70.0000	500.0000
2/AKA648	10.0000	15.0000	150.0000	150.0000	70.0000	300.0000	100.0000
4/AKA349	10.0000	10.0000	200.0000	100.0000	200.0000	200.0000	150.0000
SAKA348	7.0000	10.0000	200.0000	70.0000	70.0000	200.0000	150.0000
6/AKA647	7.0000	10.0000	150.0000	50.0000	100.0000	70.0000	70.0000
7/AKA347	7.0000	10.0000	150.0000	50.0000	100.0000	20.0000	100.0000
8/AKA346	7.0000	0.0	N	100.0000	50.0000	0.0	70.0000
4/AKA345	10.0000	0.0	L	200.0000	70.0000	20.0000	200.0000
5/DAKA646	7.0000	10.0000	150.0000	150.0000	30.0000	30.0000	70.0000
7/AKA344	15.0000	10.0000	200.0000	100.0000	100.0000	0.0	150.0000
2/AKA644	7.0000	10.0000	150.0000	50.0000	30.0000	300.0000	70.0000
3/AKA645	10.0000	0.0	L	150.0000	50.0000	20.0000	100.0000
4/AKA643	7.0000	0.0	N	200.0000	50.0000	0.0	70.0000
5/AKA642	5.0000	15.0000	150.0000	150.0000	30.0000	20.0000	150.0000
7/AKA343	10.0000	0.0	L	200.0000	100.0000	0.0	150.0000
7/AKA342	15.0000	15.0000	200.0000	150.0000	30.0000	300.0000	300.0000
8/AKA341	7.0000	0.0	L	150.0000	70.0000	0.0	150.0000
9/AKA339	10.0000	0.0	L	200.0000	100.0000	0.0	100.0000
6/DAKA638	10.0000	0.0	L	150.0000	100.0000	0.0	15.00000

TABLE 1

SAMPLE	FE PCT	MG PCT	CA PCT	MN PPM	AS PPM	B PPM	BA PPM
60' AKA340	5.0000	1.0000	0.5000	10000.0000	0.7000	30.0000	1.5000
2 AKA338	3.0000	1.0000	1.0000	10000.0000	0.5000	0.0	700.0000
3 AKA337	3.0000	1.0000	1.5000	10000.0000	0.5000	0.0	700.0000
4 AKA641	3.0000	0.7000	0.7000	10000.0000	0.5000	0.0	1.5000
5 SAKA639	3.0000	0.7000	1.0000	10000.0000	0.3000	0.0	1.5000
6 AKA640	5.0000	0.7000	1.0000	10000.0000	0.3000	0.0	1.5000
7 AKA803	3.0000	0.7000	0.7000	10000.0000	0.3000	0.0	1.5000
8 SAKA802	15.0000	1.5000	1.0000	10000.0000	0.5000	0.0	700.0000
9 SAKA801	15.0000	1.5000	0.7000	10000.0000	0.7000	0.0	700.0000
10 DAKA800	10.0000	1.0000	0.7000	10000.0000	0.5000	0.0	700.0000
' AKA799	10.0000	1.5000	2.0000	10000.0000	0.5000	0.0	700.0000
2 AKA798	5.0000	1.0000	1.0000	10000.0000	0.3000	0.0	700.0000
3 AKA797	7.0000	1.5000	1.5000	10000.0000	0.5000	0.0	700.0000
4 AKA796	3.0000	0.7000	1.5000	10000.0000	0.3000	0.0	700.0000
5 SAKA795	5.0000	0.7000	0.7000	10000.0000	0.3000	0.0	700.0000
6 AKA794	3.0000	0.7000	0.7000	10000.0000	0.3000	0.0	700.0000
7 AKA791	15.0000	1.0000	1.0000	10000.0000	0.5000	0.0	700.0000
8 AKA792	5.0000	1.0000	0.7000	10000.0000	0.5000	0.0	700.0000
9 AKA793	7.0000	1.0000	1.0000	10000.0000	0.5000	0.0	700.0000
10 DAKA715	7.0000	0.5000	0.7000	10000.0000	0.3000	0.0	700.0000
' AKA709	5.0000	1.0000	1.0000	10000.0000	0.3000	0.0	700.0000
2 AKA708	10.0000	1.0000	1.5000	10000.0000	0.5000	0.0	700.0000
3 AKA707	3.0000	0.7000	0.7000	10000.0000	0.3000	0.0	700.0000
4 AKA705	15.0000	1.5000	1.5000	10000.0000	0.7000	0.0	700.0000
5 SAKA703	15.0000	2.0000	1.5000	10000.0000	0.7000	0.0	700.0000
6 AKA704	5.0000	0.7000	0.7000	10000.0000	0.3000	0.0	700.0000
7 AKA701	7.0000	0.7000	0.7000	10000.0000	0.5000	0.0	700.0000
8 AKA702	5.0000	0.7000	0.7000	10000.0000	0.3000	0.0	700.0000
9 AKA706	2.0000	0.3000	0.7000	10000.0000	0.1000	0.0	700.0000
10 DAKA700	7.0000	0.7000	1.0000	10000.0000	0.5000	0.0	700.0000
' AKA699	2.0000	0.3000	0.7000	10000.0000	0.3000	0.0	700.0000
2 AKA698	3.0000	0.5000	1.0000	10000.0000	0.3000	0.0	700.0000
3 AKA714	3.0000	0.2000	0.7000	10000.0000	0.2000	0.0	700.0000
4 AKA710	3.0000	0.5000	0.5000	10000.0000	0.2000	0.0	700.0000
5 SAKA711	3.0000	0.3000	0.7000	10000.0000	0.2000	0.0	700.0000
6 AKA712	3.0000	0.3000	0.5000	10000.0000	0.2000	0.0	700.0000
7 AKA713	3.0000	0.3000	0.3000	10000.0000	0.1500	0.0	700.0000
8 AKA717	10.0000	0.7000	0.7000	10000.0000	0.3000	0.0	700.0000
9 AKA716	5.0000	0.5000	0.7000	10000.0000	0.3000	0.0	700.0000
60 DAKA719	1.5000	0.3000	0.7000	10000.0000	0.1000	0.0	700.0000
' AKA718	1.5000	0.2000	0.5000	10000.0000	0.1000	0.0	700.0000
2 AKA718	15.0000	1.5000	0.7000	10000.0000	0.7000	0.0	700.0000
3 AKA717	15.0000	5.0000	2.0000	10000.0000	0.7000	0.0	100.0000
4 AKA716	15.0000	3.0000	2.0000	10000.0000	0.5000	0.0	100.0000
5 SAKA715	15.0000	5.0000	3.0000	10000.0000	0.7000	0.0	50.0000
6 AKA714	15.0000	3.0000	5.0000	10000.0000	0.7000	0.0	150.0000
7 AKA712	15.0000	3.0000	3.0000	10000.0000	0.7000	0.0	300.0000
8 AKA713	10.0000	5.0000	3.0000	10000.0000	0.5000	0.0	150.0000
9 AKA717	10.0000	5.0000	2.0000	10000.0000	0.7000	0.0	50.0000
60 DAKA719	15.0000	2.0000	2.0000	10000.0000	0.7000	0.0	100.0000
' AKA718	2.0000	2.0000	2.0000	10000.0000	0.7000	0.0	50.0000

TABLE 1

SAMPLE	BI PPM	CO PPM	CR PPM	LA PPM	MO PPM	NI PPM	PB PPM	SB PPM
60/AKA340	0.0	5.0000	30.0000	100.0000	0.0	10.0000	0.0	0.0
2AKA338	0.0	0.0	30.0000	70.0000	0.0	10.0000	70.0000	0.0
SAKA337	0.0	5.0000	30.0000	70.0000	50.0000	0.0	10.0000	70.0000
4AKA641	0.0	0.0	15.0000	70.0000	0.0	10.0000	15.0000	70.0000
5AKA639	0.0	5.0000	10.0000	70.0000	0.0	10.0000	7.0000	150.0000
6AKA640	0.0	5.0000	0.0	70.0000	0.0	0.0	0.0	30.0000
7AKA803	0.0	0.0	15.0000	50.0000	0.0	0.0	10.0000	0.0
8AKA802	0.0	30.0000	20.0000	150.0000	150.0000	0.0	20.0000	150.0000
9AKA801	0.0	30.0000	50.0000	150.0000	30.0000	0.0	30.0000	300.0000
6/6AKA800	0.0	10.0000	30.0000	70.0000	0.0	0.0	20.0000	100.0000
7AKA799	0.0	10.0000	10.0000	30.0000	20.0000	0.0	10.0000	70.0000
7AKA798	0.0	7.0000	15.0000	20.0000	0.0	0.0	15.0000	70.0000
3AKA792	0.0	10.0000	10.0000	30.0000	20.0000	0.0	20.0000	300.0000
YAKA796	0.0	5.0000	10.0000	30.0000	0.0	0.0	10.0000	200.0000
SAKA795	0.0	10.0000	15.0000	50.0000	20.0000	0.0	20.0000	30.0000
BAKA794	0.0	10.0000	15.0000	50.0000	0.0	0.0	20.0000	30.0000
7AKA791	0.0	15.0000	20.0000	150.0000	30.0000	5.0000	10.0000	70.0000
7AKA792	0.0	10.0000	30.0000	50.0000	0.0	0.0	10.0000	20.0000
YAKA793	0.0	15.0000	30.0000	70.0000	30.0000	0.0	10.0000	20.0000
SAKA703	0.0	15.0000	70.0000	50.0000	0.0	0.0	7.0000	15.0000
62/AKA715	0.0	5.0000	0.0	50.0000	0.0	0.0	0.0	15.0000
1AKA709	0.0	0.0	15.0000	100.0000	0.0	0.0	0.0	7.0000
2AKA708	0.0	10.0000	30.0000	100.0000	20.0000	0.0	10.0000	20.0000
3AKA707	0.0	5.0000	15.0000	70.0000	30.0000	0.0	10.0000	70.0000
YAKA705	0.0	20.0000	30.0000	20.0000	7.0000	0.0	10.0000	30.0000
SAKA703	0.0	15.0000	70.0000	50.0000	70.0000	5.0000	10.0000	30.0000
62/AKA704	0.0	7.0000	30.0000	15.0000	0.0	0.0	0.0	15.0000
7AKA701	0.0	10.0000	30.0000	7.0000	30.0000	0.0	10.0000	70.0000
SAKA702	0.0	70.0000	30.0000	0.0	50.0000	0.0	10.0000	15.0000
9AKA706	0.0	0.0	10.0000	5.0000	0.0	0.0	5.0000	100.0000
63/6AKA700	0.0	7.0000	15.0000	10.0000	30.0000	0.0	10.0000	15.0000
1/AKA699	0.0	0.0	10.0000	5.0000	0.0	0.0	0.0	10.0000
2AKA698	0.0	5.0000	10.0000	5.0000	0.0	0.0	0.0	5.0000
3AKA714	0.0	0.0	0.0	0.0	30.0000	0.0	5.0000	30.0000
YAKA710	0.0	0.0	10.0000	5.0000	20.0000	5.0000	5.0000	70.0000
SAKA711	0.0	0.0	10.0000	5.0000	50.0000	0.0	0.0	20.0000
62/6AKA719	0.0	0.0	5.0000	10.0000	0.0	0.0	0.0	20.0000
1/AKA718	0.0	0.0	0.0	0.0	30.0000	0.0	0.0	15.0000
2AKA713	0.0	70.0000	10.0000	100.0000	100.0000	0.0	10.0000	150.0000
3AKA717	0.0	70.0000	300.0000	70.0000	20.0000	0.0	10.0000	150.0000
4AKA716	0.0	30.0000	150.0000	70.0000	30.0000	0.0	10.0000	70.0000
SAK1575	0.0	50.0000	300.0000	50.0000	70.0000	0.0	10.0000	150.0000
6AKA714	0.0	30.0000	150.0000	30.0000	50.0000	0.0	10.0000	70.0000
7AKA712	0.0	30.0000	150.0000	150.0000	50.0000	0.0	10.0000	70.0000
8AKA713	0.0	20.0000	70.0000	70.0000	20.0000	0.0	10.0000	30.0000
9AKA716	0.0	30.0000	70.0000	70.0000	20.0000	0.0	10.0000	70.0000
6/6AKA718	0.0	30.0000	150.0000	150.0000	50.0000	0.0	10.0000	70.0000
6/6AKA719	0.0	30.0000	150.0000	150.0000	50.0000	0.0	10.0000	70.0000
6/6AKA718	0.0	30.0000	150.0000	150.0000	50.0000	0.0	10.0000	70.0000

TABLE 1

SAMPLE	SC PPM	SR PPM	SN PPM	W PPM	V PPM	Y PPM	ZN PPM	ZR PPM	AU PPM
60/AKA340	10.0000	0.0	L	200.0000	100.0000	0.0	200.0000	150.0000	0.0200L
2AKA338	7.0000	0.0	L	200.0000	70.0000	0.0	200.0000	100.0000	0.0200L
3AKA337	10.0000	10.0000	L	200.0000	70.0000	0.0	200.0000	300.0000	0.0200L
4AKA641	7.0000	0.0	L	150.0000	30.0000	15.0000	0.0	70.0000	0.0200L
5AKA639	7.0000	0.0	L	200.0000	50.0000	15.0000	300.0000	100.0000	0.0200L
6AKA640	7.0000	0.0	L	200.0000	30.0000	20.0000	0.0	70.0000	0.0200L
7AKA803	7.0000	0.0	L	150.0000	70.0000	70.0000	500.0000	70.0000	0.0200L
8AKA802	20.0000	10.0000	L	200.0000	150.0000	0.0	150.0000	300.0000	0.0200L
9AKA801	20.0000	30.0000	L	200.0000	150.0000	0.0	100.0000	200.0000	0.0200L
60/AKA800	15.0000	100.0000	N	150.0000	100.0000	0.0	15.0000	200.0000	0.0200L
/AKA799	15.0000	0.0	N	300.0000	150.0000	15.0000	0.0	200.0000	0.0200L
ZAKA798	15.0000	0.0	N	200.0000	100.0000	70.0000	30.0000	150.0000	0.0200L
3AKAT97	15.0000	0.0	N	300.0000	100.0000	70.0000	30.0000	70.0000	0.0200L
4AKAT96	15.0000	0.0	N	200.0000	150.0000	70.0000	30.0000	100.0000	0.0200L
5AKAT95	7.0000	0.0	N	200.0000	70.0000	15.0000	0.0	200.0000	0.0200L
6AKAT94	7.0000	0.0	N	200.0000	50.0000	20.0000	0.0	100.0000	0.0200L
7AKA791	15.0000	0.0	L	200.0000	150.0000	50.0000	500.0000	300.0000	0.0200L
8AKAT92	15.0000	0.0	L	200.0000	150.0000	30.0000	200.0000	70.0000	0.0200L
9AKAT93	15.0000	0.0	N	200.0000	150.0000	70.0000	30.0000	300.0000	0.0200L
60/AKAT15	7.0000	0.0	M	150.0000	150.0000	15.0000	0.0	300.0000	0.0200L
/AKA709	10.0000	0.0	N	100.0000	150.0000	70.0000	0.0	300.0000	0.0200L
ZAKA708	15.0000	0.0	N	200.0000	150.0000	30.0000	0.0	300.0000	0.0200L
3AKAT07	7.0000	0.0	L	200.0000	70.0000	15.0000	0.0	70.0000	0.0200L
4AKAT05	20.0000	0.0	N	300.0000	150.0000	50.0000	50.0000	150.0000	0.0200L
5AKAT03	20.0000	15.0000	N	300.0000	150.0000	50.0000	50.0000	300.0000	0.0200L
6AKAT04	7.0000	0.0	L	200.0000	50.0000	20.0000	0.0	150.0000	0.0200L
7AKA701	10.0000	0.0	N	200.0000	70.0000	20.0000	0.0	300.0000	0.0200L
8AKAT02	7.0000	0.0	N	150.0000	50.0000	30.0000	0.0	150.0000	0.0800
9AKAT06	5.0000	0.0	N	200.0000	20.0000	10.0000	0.0	100.0000	0.0200L
60/AKAT00	15.0000	0.0	L	300.0000	100.0000	30.0000	0.0	300.0000	0.0200L
/AKA699	5.0000	0.0	N	200.0000	20.0000	20.0000	0.0	300.0000	0.0200L
ZAKA698	5.0000	0.0	N	300.0000	30.0000	15.0000	0.0	300.0000	0.0200L
3AKAT14	5.0000	0.0	N	150.0000	20.0000	30.0000	0.0	1000.0000	0.0200L
4AKAT10	10.0000	10.0000	N	100.0000	20.0000	20.0000	0.0	300.0000	0.0200L
5AKAT11	0.0	0	L	100.0000	20.0000	10.0000	0.0	200.0000	0.0200L
6AKAT12	0.0	0	N	100.0000	20.0000	15.0000	0.0	150.0000	0.0200L
7AKAT13	5.0000	0.0	L	100.0000	20.0000	20.0000	0.0	300.0000	0.0200L
8AKAT17	10.0000	0.0	N	100.0000	70.0000	30.0000	700.0000	150.0000	0.0200L
9AKAT16	10.0000	0.0	N	200.0000	30.0000	10.0000	0.0	70.0000	0.0200L
60/AKAT19	0.0	0	L	100.0000	15.0000	15.0000	0.0	200.0000	0.0200L
/AKAT18	0.0	0	N	100.0000	15.0000	10.0000	0.0	150.0000	0.0200L
1AK1578	20.0000	0.0	N	150.0000	20.0000	30.0000	200.0000	150.0000	0.0600
3AK1577	20.0000	0.0	N	300.0000	150.0000	20.0000	0.0	70.0000	0.0200L
4AK1576	20.0000	0.0	N	700.0000	150.0000	50.0000	0.0	200.0000	0.0200L
5AK1575	30.0000	0.0	N	700.0000	200.0000	30.0000	0.0	100.0000	0.0200L
6AK1574	20.0000	0.0	N	1000.0000	200.0000	30.0000	0.0	200.0000	0.0200L
7AK1572	20.0000	0.0	N	1000.0000	200.0000	30.0000	0.0	200.0000	0.0200L
8AK1573	15.0000	0.0	N	700.0000	150.0000	50.0000	0.0	150.0000	0.0200L
9AK1565	20.0000	0.0	N	500.0000	200.0000	20.0000	0.0	200.0000	0.0200L
60/AK1566	20.0000	0.0	N	500.0000	200.0000	20.0000	0.0	300.0000	0.0200L

TABLE I

SAMPLE	FE PCT	CA PCT	MN PPM	AS PPM	AG PPM	B PPM	BA PPM	BE PPM
65' AK1567	10.0000	1.0000	1500.0000	0.0	0.0	1500.0000	1500.0000	1.5000
3 AK1564	10.0000	2.0000	1500.0000	0.0	0.0	50.0000	700.0000	3.0000
SAK1579	10.0000	5.0000	1000.0000	0.0	0.0	70.0000	700.0000	3.0000
4 AK1580	15.0000	7.0000	1500.0000	0.0	0.0	100.0000	700.0000	3.0000
SAK1568	15.0000	5.0000	1500.0000	0.0	0.0	70.0000	1000.0000	3.0000
6 AK1569	10.0000	2.0000	1.0000	0.0	0.0	70.0000	700.0000	1.5000
7 AK1571	15.0000	5.0000	1.0000	0.0	0.0	300.0000	1500.0000	3.0000
8 AK1570	10.0000	3.0000	1.5000	0.0	0.0	70.0000	700.0000	1.5000
9 AK1590	10.0000	5.0000	2.0000	0.0	0.0	200.0000	700.0000	3.0000
660 AK1591	10.0000	1.0000	0.5000	0.0	0.0	3000.0000	300.0000	1.0000
1 AK1588	15.0000	7.0000	3.0000	0.0	0.0	70.0000	1000.0000	5.0000
2 AK1589	10.0000	7.0000	2.0000	0.0	0.0	100.0000	700.0000	2.0000
3 AK1587	15.0000	5.0000	2.0000	0.3000	0.0	0.0	150.0000	700.0000
4 AK1596	15.0000	3.0000	0.2000	0.5000	0.0	0.0	30.0000	700.0000
5 SAK1597	10.0000	1.5000	0.7000	1500.0000	0.0	0.0	70.0000	1500.0000
6 AK1595	15.0000	2.0000	1.5000	0.7000	0.0	0.0	50.0000	1500.0000
7 AK1598	15.0000	3.0000	2.0000	0.7000	0.0	0.0	50.0000	1000.0000
8 AK1593	10.0000	2.0000	1.0000	0.7000	0.0	0.0	70.0000	1500.0000
9 AK1594	15.0000	3.0000	3.0000	0.7000	0.0	0.0	20.0000	700.0000
670 AK1592	10.0000	2.0000	5.0000	0.5000	0.0	0.0	30.0000	500.0000
1 AK1115	7.0000	1.5000	0.7000	0.5000	0.0	0.0	20.0000	700.0000
2 AK1330	7.0000	1.5000	1.0000	0.7000	0.0	0.0	30.0000	700.0000
3 AK1329	7.0000	1.5000	2.0000	0.7000	0.0	0.0	30.0000	700.0000
4 AK1328	10.0000	1.0000	1.0000	0.7000	0.0	0.0	20.0000	1000.0000
5 SAK1327	7.0000	1.5000	1.5000	0.5000	0.0	0.0	20.0000	700.0000
6 AK1331	7.0000	1.5000	2.0000	0.7000	0.0	0.0	20.0000	700.0000
7 AK1332	5.0000	1.5000	1.5000	0.7000	0.0	0.0	70.0000	700.0000
8 AK1333	7.0000	1.5000	0.7000	1000.0000	0.0	0.0	30.0000	700.0000
9 AK1114	7.0000	1.5000	1.5000	0.7000	0.0	0.0	20.0000	700.0000
680 AK1335	7.0000	1.5000	0.7000	1500.0000	0.0	0.0	50.0000	700.0000
1 AK1336	10.0000	1.5000	1.0000	0.7000	0.0	0.0	30.0000	700.0000
2 AK1113	7.0000	1.5000	1.5000	0.7000	0.0	0.0	30.0000	700.0000
3 AK1337	7.0000	1.5000	2.0000	0.5000	5000.0000	0.0	50.0000	700.0000
4 AK1112	5.0000	1.0000	0.5000	0.3000	5000.0000	0.0	30.0000	700.0000
5 SAK1111	7.0000	1.0000	0.5000	0.7000	1500.0000	0.0	30.0000	700.0000
6 AK1109	7.0000	1.0000	0.5000	0.7000	1500.0000	0.0	30.0000	700.0000
7 AK1110	7.0000	1.0000	0.5000	0.5000	30000.0000	0.0	30.0000	700.0000
8 AK1338	10.0000	3.0000	2.0000	0.5000	5000.0000	0.0	50.0000	700.0000
9 AK1322	5.0000	1.5000	2.0000	0.5000	700.0000	0.0	30.0000	700.0000
690 AK1325	3.0000	2.0000	1.0000	0.3000	700.0000	0.0	100.0000	300.0000
7 AK1326	7.0000	3.0000	1.5000	0.5000	1500.0000	0.0	15.0000	700.0000
8 AK1324	7.0000	3.0000	1.5000	0.5000	1500.0000	0.0	15.0000	500.0000
9 AK1323	5.0000	3.0000	1.5000	0.5000	700.0000	0.0	30.0000	700.0000
4 AK1342	7.0000	5.0000	1.5000	0.7000	2000.0000	0.0	100.0000	300.0000
5 SAK1341	10.0000	5.0000	3.0000	0.5000	1500.0000	0.0	100.0000	700.0000
6 AK1107	5.0000	1.0000	1.5000	0.5000	1500.0000	0.0	15.0000	300.0000
7 AK1108	5.0000	1.5000	0.5000	0.5000	1000.0000	0.0	50.0000	500.0000
8 AK1106	10.0000	1.5000	0.5000	0.7000	1500.0000	0.0	30.0000	700.0000
9 AK1315	7.0000	1.0000	0.7000	0.7000	2000.0000	0.0	30.0000	700.0000
700 AK1314	5.0000	1.5000	0.5000	0.7000	1500.0000	0.0	30.0000	700.0000

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TABLE 1

SAMPLE	Bi PPM	CD PPM	CR PPM	LA PPM	MD PPM	NB PPM	NI PPM	PB PPM	SB PPM	PPM
65 AKI567	0.0	N	70.0000	20.0000	0.0	10.0000	100.0000	30.0000	0.0	0.0
65 AKI564	0.0	N	20.0000	200.0000	0.0	30.0000	150.0000	150.0000	0.0	0.0
3 AKI579	0.0	N	30.0000	300.0000	0.0	70.0000	30.0000	10.0000	10.0000	0.0
YAK1580	0.0	N	50.0000	700.0000	0.0	70.0000	50.0000	10.0000	200.0000	50.0000
5 AKI568	0.0	N	70.0000	300.0000	0.0	70.0000	10.0000	150.0000	150.0000	0.0
6 AKI569	0.0	N	30.0000	150.0000	0.0	30.0000	10.0000	150.0000	70.0000	0.0
7 AKI571	0.0	N	50.0000	500.0000	0.0	200.0000	100.0000	10.0000	150.0000	30.0000
6 AKI570	0.0	N	70.0000	200.0000	0.0	100.0000	50.0000	10.0000	150.0000	0.0
9 AKI590	0.0	N	50.0000	300.0000	0.0	70.0000	70.0000	15.0000	200.0000	30.0000
66 AKI591	0.0	N	70.0000	70.0000	0.0	20.0000	0.0	0.0	150.0000	0.0
1 AKI588	0.0	N	70.0000	700.0000	0.0	100.0000	100.0000	15.0000	200.0000	30.0000
2 AKI589	0.0	N	70.0000	500.0000	0.0	200.0000	100.0000	10.0000	150.0000	30.0000
3 AKI587	0.0	N	30.0000	300.0000	0.0	150.0000	50.0000	10.0000	150.0000	0.0
YAK1596	0.0	N	30.0000	70.0000	0.0	50.0000	70.0000	10.0000	100.0000	0.0
5 AKI597	0.0	N	30.0000	150.0000	0.0	70.0000	0.0	10.0000	100.0000	0.0
6 AKI595	0.0	N	50.0000	100.0000	0.0	70.0000	0.0	10.0000	100.0000	0.0
TAK1598	0.0	N	30.0000	150.0000	0.0	70.0000	0.0	10.0000	100.0000	0.0
7 AKI593	0.0	N	50.0000	150.0000	0.0	70.0000	20.0000	15.0000	150.0000	0.0
7 AKI594	0.0	N	50.0000	20.0000	0.0	0.0	N	10.0000	10.0000	0.0
670 AKI592	0.0	N	30.0000	20.0000	0.0	150.0000	0.0	10.0000	30.0000	0.0
'AKI115	0.0	N	15.0000	150.0000	0.0	50.0000	0.0	10.0000	50.0000	0.0
LAK1330	0.0	N	20.0000	100.0000	0.0	70.0000	0.0	10.0000	50.0000	0.0
3 AKI1329	0.0	N	20.0000	100.0000	0.0	70.0000	0.0	10.0000	70.0000	0.0
4 AKI1328	0.0	N	20.0000	150.0000	0.0	70.0000	0.0	10.0000	70.0000	0.0
5 AKI1327	0.0	N	15.0000	150.0000	0.0	30.0000	0.0	0.0	70.0000	0.0
6 AKI1331	0.0	N	20.0000	70.0000	0.0	30.0000	0.0	10.0000	30.0000	0.0
7 AKI1332	0.0	N	20.0000	150.0000	0.0	70.0000	0.0	10.0000	70.0000	0.0
FAK1333	0.0	N	20.0000	100.0000	0.0	50.0000	0.0	10.0000	100.0000	0.0
9 AKI114	0.0	N	15.0000	70.0000	0.0	50.0000	0.0	10.0000	30.0000	0.0
68 AKI1335	0.0	N	20.0000	150.0000	0.0	70.0000	0.0	10.0000	70.0000	0.0
'AKI1336	0.0	N	20.0000	150.0000	0.0	70.0000	0.0	10.0000	70.0000	0.0
2 AKI113	0.0	N	20.0000	100.0000	0.0	30.0000	0.0	10.0000	150.0000	0.0
3 AKI1337	0.0	N	50.0000	150.0000	0.0	300.0000	50.0000	20.0000	10.0000	30.0000
4 AKI112	0.0	N	30.0000	100.0000	0.0	70.0000	0.0	10.0000	100.0000	0.0
5 AKI111	0.0	N	10.0000	150.0000	0.0	70.0000	0.0	10.0000	70.0000	0.0
6 AKI109	0.0	N	15.0000	150.0000	0.0	70.0000	0.0	10.0000	100.0000	50.0000
7 AKI110	0.0	N	20.0000	150.0000	0.0	70.0000	0.0	10.0000	150.0000	50.0000
2 AKI113	0.0	N	30.0000	300.0000	0.0	50.0000	0.0	0.0	100.0000	0.0
3 AKI1338	0.0	N	30.0000	20.0000	0.0	15.0000	0.0	0.0	100.0000	50.0000
5 AKI1322	0.0	N	30.0000	100.0000	0.0	20.0000	0.0	10.0000	100.0000	0.0
69 AKI1325	0.0	N	15.0000	200.0000	0.0	30.0000	0.0	10.0000	150.0000	30.0000
'AKI1326	0.0	N	20.0000	300.0000	0.0	150.0000	50.0000	0.0	10.0000	50.0000
2 AKI1324	0.0	N	30.0000	300.0000	0.0	70.0000	0.0	0.0	70.0000	0.0
3 AKI1323	0.0	N	20.0000	300.0000	0.0	30.0000	0.0	10.0000	150.0000	100.0000
5 AKI1342	0.0	N	30.0000	700.0000	0.0	150.0000	150.0000	10.0000	150.0000	100.0000
5 AKI1341	0.0	N	30.0000	700.0000	0.0	150.0000	10.0000	10.0000	100.0000	30.0000
6 AKI107	0.0	N	15.0000	30.0000	0.0	50.0000	0.0	10.0000	30.0000	0.0
7 AKI108	0.0	N	15.0000	150.0000	0.0	70.0000	0.0	10.0000	100.0000	30.0000
8 AKI106	0.0	N	15.0000	150.0000	0.0	70.0000	0.0	10.0000	70.0000	0.0
5 AKI1315	0.0	N	20.0000	100.0000	0.0	150.0000	100.0000	10.0000	100.0000	30.0000
70 AKI1314	0.0	N	20.0000	150.0000	0.0	70.0000	10.0000	10.0000	100.0000	30.0000

TABLE 1

SAMPLE	SC PPM	SR PPM	V PPM	W PPM	Y PPM	ZN PPM	AU PPM
65/AK1567	20.0000	300.0000	200.0000	0.0	30.0000	0.0	0.0200L
7AK1564	15.0000	0.0	500.0000	150.0000	0.0	30.0000	0.0200L
8AK1579	20.0000	0.0	500.0000	150.0000	0.0	70.0000	0.0200L
9AK1580	30.0000	0.0	700.0000	150.0000	0.0	300.0000	0.0200L
5AK1568	20.0000	0.0	500.0000	150.0000	0.0	20.0000	0.0200L
6AK1569	15.0000	0.0	200.0000	150.0000	0.0	50.0000	0.0200L
7AK1571	30.0000	0.0	700.0000	200.0000	0.0	30.0000	0.0600
8AK1570	30.0000	0.0	300.0000	200.0000	0.0	300.0000	0.0200L
9AK1590	15.0000	0.0	500.0000	150.0000	0.0	20.0000	0.0200L
5AK1591	7.0000	15.0000	100.0000	100.0000	0.0	15.0000	0.0200L
6AK1588	30.0000	0.0	700.0000	200.0000	0.0	30.0000	0.0400
1AK1589	20.0000	10.0000	300.0000	200.0000	0.0	20.0000	0.0200L
8AK1587	15.0000	0.0	300.0000	100.0000	0.0	15.0000	0.0200L
9AK1596	15.0000	0.0	100.0000	200.0000	0.0	15.0000	0.0200L
5AK1597	20.0000	0.0	200.0000	200.0000	0.0	20.0000	0.0200L
6AK1595	20.0000	0.0	300.0000	300.0000	0.0	15.0000	0.0200L
1AK1598	20.0000	0.0	300.0000	200.0000	0.0	20.0000	0.0200L
8AK1593	30.0000	0.0	300.0000	200.0000	0.0	30.0000	0.0200L
9AK1594	15.0000	0.0	500.0000	200.0000	0.0	15.0000	0.0200L
5AK1592	15.0000	0.0	500.0000	200.0000	0.0	15.0000	0.0200L
6AK1115	10.0000	0.0	150.0000	200.0000	0.0	10.0000	0.0200L
7AK1330	15.0000	0.0	200.0000	150.0000	0.0	15.0000	0.0200L
8AK1329	15.0000	0.0	200.0000	150.0000	0.0	15.0000	0.0200L
9AK1328	15.0000	0.0	200.0000	150.0000	0.0	15.0000	0.0200L
5AK1327	15.0000	0.0	300.0000	150.0000	0.0	15.0000	0.0200L
6AK1331	15.0000	0.0	300.0000	150.0000	0.0	15.0000	0.0200L
7AK1332	15.0000	0.0	200.0000	150.0000	0.0	15.0000	0.0200L
8AK1333	15.0000	0.0	150.0000	150.0000	0.0	15.0000	0.0200L
9AK1114	15.0000	0.0	200.0000	200.0000	0.0	10.0000	0.0200L
5AK1335	15.0000	0.0	200.0000	150.0000	0.0	15.0000	0.0200L
6AK1336	15.0000	0.0	200.0000	150.0000	0.0	15.0000	0.0200L
7AK1113	15.0000	0.0	200.0000	150.0000	0.0	15.0000	0.0200L
8AK1337	15.0000	0.0	300.0000	150.0000	0.0	300.0000	0.1000
9AK1112	15.0000	0.0	150.0000	150.0000	0.0	15.0000	0.0200L
5AK1111	15.0000	0.0	100.0000	150.0000	0.0	10.0000	0.0200L
6AK1109	15.0000	0.0	100.0000	200.0000	0.0	20.0000	0.0200L
7AK1110	15.0000	0.0	100.0000	200.0000	0.0	15.0000	0.0200L
8AK1329	15.0000	0.0	300.0000	150.0000	0.0	20.0000	0.0200L
9AK1322	15.0000	0.0	500.0000	100.0000	0.0	15.0000	0.0200L
5AK1325	10.0000	0.0	200.0000	70.0000	0.0	20.0000	0.0200L
6AK1326	15.0000	0.0	300.0000	150.0000	0.0	20.0000	0.0200L
7AK1324	15.0000	0.0	0.0	200.0000	0.0	15.0000	0.0200L
8AK1323	15.0000	0.0	300.0000	150.0000	0.0	30.0000	0.0200L
9AK1322	15.0000	15.0000	0.0	300.0000	150.0000	70.0000	0.0200L
5AK1341	20.0000	0.0	500.0000	150.0000	0.0	20.0000	0.0200L
6AK1107	15.0000	0.0	300.0000	150.0000	0.0	15.0000	0.0200L
7AK1108	7.0000	0.0	100.0000	150.0000	0.0	15.0000	0.0200L
8AK1106	15.0000	0.0	150.0000	150.0000	0.0	20.0000	0.0200L
9AK1315	15.0000	0.0	150.0000	200.0000	0.0	15.0000	0.0200L
5AK1314	15.0000	0.0	150.0000	200.0000	0.0	15.0000	0.0200L

TABLE I

SAMPLE	FE PCT	MG PCT	CA PCT	MN PPM	AS PPM	B PPM	BA PPM	BE PPM
70 <sup>a</sup> AKI1312	7.0000	2.0000	1.5000	1500.0000	0.0	0.0	0.0	N
2AKI1313	5.0000	1.5000	0.3000	1500.0000	0.0	0.0	30.0000	L
3AKI105	7.0000	0.7000	0.5000	1500.0000	0.0	0.0	30.0000	L
4AKI104	3.0000	1.5000	0.5000	1000.0000	0.0	0.0	30.0000	L
SAKI1317	3.0000	3.0000	0.7000	0.3000	1000.0000	0.0	30.0000	1.0000
6AKI1318	3.0000	3.0000	1.0000	0.3000	1500.0000	1.5000	30.0000	1.0000
7AKI1319	10.0000	3.0000	1.5000	0.3000	1500.0000	0.5000	30.0000	1.0000
8AKI1321	10.0000	5.0000	1.5000	0.7000	1500.0000	0.5000	30.0000	1.5000
9AKI1320	10.0000	5.0000	3.0000	0.7000	1500.0000	0.5000	20.0000	1.5000
7/0 AKI1316	5.0000	3.0000	0.7000	0.5000	1000.0000	0.0	30.0000	700.0000
7AKI1310	7.0000	1.5000	0.7000	0.7000	1500.0000	0.0	30.0000	1.0000
2AKI1308	7.0000	1.5000	0.5000	0.5000	1500.0000	0.0	30.0000	1.0000
3AKI1311	10.0000	1.5000	0.5000	1.0000	1500.0000	0.0	0.0	L
4AKI1309	10.0000	1.5000	1.0000	0.7000	2000.0000	1.0000	0.0	L
SAKI1306	7.0000	1.5000	0.7000	0.7000	2000.0000	0.0	0.0	L
6AKI1307	3.0000	2.0000	1.0000	0.5000	300.0000	0.0	50.0000	1500.0000
7AKI1305	10.0000	5.0000	3.0000	0.5000	1500.0000	14.0000	50.0000	300.0000
SAKI1304	10.0000	3.0000	2.0000	0.7000	1500.0000	0.0	0.0	L
7AKI1301	7.0000	3.0000	1.5000	0.5000	700.0000	0.0	0.0	L
720 AKI1302	10.0000	2.0000	1.0000	0.7000	1000.0000	0.0	0.0	L
' AKI1303	15.0000	2.0000	0.7000	0.7000	1500.0000	0.0	0.0	L
2AKI1300	15.0000	1.5000	1.5000	0.7000	1500.0000	1.5000	300.0000	500.0000
3AKI1298	7.0000	2.0000	1.5000	0.5000	1500.0000	1.0000	0.0	L
4AKI1299	10.0000	3.0000	1.5000	0.7000	1000.0000	1.5000	200.0000	10.0000
SAKI1296	15.0000	5.0000	2.0000	0.5000	1500.0000	1.5000	200.0000	300.0000
4AKI1297	10.0000	5.0000	5.0000	0.5000	1500.0000	0.0	0.0	L
7AKI1294	3.0000	5.0000	2.0000	0.3000	1500.0000	0.0	0.0	L
7AKI1295	3.0000	3.0000	1.5000	0.5000	1000.0000	0.0	300.0000	2.00000
9AKI1103	5.0000	1.0000	0.7000	0.5000	1000.0000	0.0	20.0000	700.0000
730 AKI1102	10.0000	1.0000	0.5000	0.7000	1000.0000	0.0	0.0	L
' AKI1101	10.0000	1.5000	1.5000	0.7000	1500.0000	0.0	20.0000	500.0000
2AKI1100	3.0000	1.0000	0.7000	0.5000	1500.0000	0.0	20.0000	500.0000
3AKI1098	5.0000	1.0000	0.7000	0.7000	700.0000	0.0	20.0000	700.0000
4AKI1097	3.0000	1.0000	0.7000	0.3000	1500.0000	0.0	20.0000	500.0000
SAKI1089	5.0000	1.5000	1.5000	0.3000	1000.0000	0.0	10.0000	500.0000
4AKI1096	3.0000	1.0000	0.5000	0.7000	1500.0000	0.0	30.0000	700.0000
7AKI1273	7.0000	1.5000	0.5000	0.5000	1000.0000	0.7000	100.0000	0.0
7AKI1274	3.0000	1.0000	0.5000	0.5000	1500.0000	0.5000	0.0	L
4AKI1095	5.0000	1.5000	0.7000	0.5000	1500.0000	1.5000	0.0	L
740 AKI1090	5.0000	1.0000	0.7000	0.5000	1500.0000	0.7000	200.0000	30.0000
' AKI1094	5.0000	1.0000	0.2000	0.5000	700.0000	0.0	0.0	L
2AKI1093	5.0000	1.5000	0.7000	0.5000	1000.0000	0.5000	30.0000	700.0000
3AKI1092	3.0000	1.0000	0.7000	0.3000	500.0000	0.0	30.0000	300.0000
7AKI1275	5.0000	1.0000	0.7000	0.7000	1500.0000	0.0	30.0000	700.0000
SAKI1276	7.0000	1.5000	1.0000	0.5000	1500.0000	0.7000	30.0000	700.0000
' AKI1091	5.0000	1.5000	1.0000	0.2000	1000.0000	0.5000	20.0000	300.0000
7AKI109	7.0000	2.0000	1.0000	0.7000	1000.0000	0.7000	20.0000	700.0000
PAKI1088	7.0000	1.5000	0.7000	0.7000	1500.0000	0.7000	50.0000	300.0000
SAKI1087	7.0000	1.5000	0.7000	0.3000	1500.0000	0.7000	50.0000	300.0000
750 AKI1081	5.0000	0.3000	0.3000	0.0	1500.0000	0.0	20.0000	300.0000

TABLE 1

SAMPLE	BI PPM	CO PPM	CR PPM	CU PPM	LA PPM	NB PPM	NI PPM	PB PPM	SB PPM
70/ AKI312	0.0	15.0000	50.0000	30.0000	0.0	0.0	20.0000	15.0000	0.0
2AKI313	0.0	30.0000	150.0000	70.0000	0.0	10.0000	70.0000	30.0000	0.0
3AKI105	0.0	15.0000	100.0000	70.0000	0.0	10.0000	70.0000	20.0000	0.0
YAKI104	0.0	20.0000	200.0000	30.0000	0.0	10.0000	70.0000	50.0000	0.0
YAKI317	0.0	20.0000	300.0000	50.0000	0.0	10.0000	70.0000	100.0000	0.0
6AKI318	0.0	20.0000	300.0000	30.0000	0.0	10.0000	100.0000	70.0000	0.0
7AKI319	0.0	30.0000	200.0000	70.0000	0.0	10.0000	150.0000	70.0000	0.0
8AKI321	0.0	30.0000	300.0000	70.0000	0.0	10.0000	150.0000	70.0000	0.0
9AKI320	0.0	20.0000	300.0000	70.0000	0.0	10.0000	150.0000	100.0000	0.0
7/0 AKI316	0.0	20.0000	300.0000	70.0000	0.0	10.0000	70.0000	30.0000	0.0
/, AKI310	0.0	20.0000	300.0000	70.0000	0.0	10.0000	100.0000	30.0000	0.0
8 AKI308	0.0	20.0000	150.0000	70.0000	0.0	10.0000	100.0000	30.0000	0.0
3 AKI311	0.0	30.0000	150.0000	70.0000	0.0	10.0000	150.0000	30.0000	0.0
4 AKI1309	0.0	20.0000	150.0000	100.0000	0.0	10.0000	70.0000	30.0000	0.0
YAKI306	0.0	50.0000	150.0000	70.0000	0.0	10.0000	70.0000	30.0000	0.0
6AKI307	0.0	10.0000	150.0000	50.0000	0.0	10.0000	70.0000	20.0000	0.0
7AKI305	0.0	50.0000	700.0000	70.0000	0.0	10.0000	150.0000	70.0000	0.0
8AKI304	0.0	30.0000	200.0000	100.0000	0.0	10.0000	100.0000	30.0000	0.0
9AKI301	0.0	20.0000	300.0000	70.0000	0.0	10.0000	70.0000	30.0000	0.0
720AKI302	0.0	30.0000	100.0000	150.0000	0.0	10.0000	70.0000	20.0000	0.0
1, AKI303	0.0	50.0000	150.0000	150.0000	0.0	10.0000	150.0000	30.0000	0.0
1AKI300	0.0	70.0000	700.0000	200.0000	0.0	10.0000	150.0000	150.0000	0.0
2AKI298	0.0	30.0000	50.0000	100.0000	0.0	10.0000	70.0000	150.0000	0.0
4AKI299	0.0	20.0000	300.0000	70.0000	0.0	10.0000	150.0000	200.0000	0.0
5AKI296	0.0	70.0000	300.0000	300.0000	0.0	10.0000	150.0000	70.0000	0.0
6AKI297	0.0	20.0000	500.0000	20.0000	0.0	10.0000	150.0000	70.0000	0.0
7AKI294	0.0	20.0000	500.0000	30.0000	0.0	10.0000	150.0000	30.0000	0.0
8AKI295	0.0	15.0000	150.0000	50.0000	0.0	10.0000	50.0000	20.0000	0.0
9AKI103	0.0	20.0000	100.0000	50.0000	0.0	10.0000	70.0000	30.0000	0.0
730 AKI102	0.0	20.0000	150.0000	50.0000	0.0	10.0000	70.0000	15.0000	0.0
1, AKI101	0.0	20.0000	100.0000	30.0000	0.0	10.0000	50.0000	30.0000	0.0
2AKI110	0.0	70.0000	150.0000	70.0000	0.0	10.0000	70.0000	70.0000	0.0
3AKI098	0.0	15.0000	150.0000	30.0000	0.0	10.0000	70.0000	0.0	0.0
4AKI097	0.0	10.0000	100.0000	30.0000	0.0	0.0	30.0000	200.0000	0.0
5AKI089	0.0	15.0000	0.0	30.0000	0.0	10.0000	5.0000	15.0000	0.0
6AKI096	0.0	15.0000	150.0000	30.0000	0.0	10.0000	70.0000	30.0000	0.0
7AKI1273	0.0	15.0000	150.0000	30.0000	0.0	10.0000	50.0000	30.0000	0.0
8AKI1274	0.0	15.0000	150.0000	70.0000	0.0	10.0000	70.0000	20.0000	0.0
9AKI095	0.0	50.0000	150.0000	70.0000	0.0	10.0000	100.0000	70.0000	0.0
740 AKI090	0.0	30.0000	70.0000	50.0000	0.0	10.0000	50.0000	30.0000	0.0
1, AKI094	0.0	15.0000	150.0000	30.0000	0.0	10.0000	70.0000	20.0000	0.0
2AKI093	0.0	20.0000	150.0000	30.0000	0.0	10.0000	50.0000	15.0000	0.0
3AKI092	0.0	10.0000	150.0000	20.0000	0.0	0.0	30.0000	10.0000	0.0
4AKI1275	0.0	15.0000	150.0000	30.0000	0.0	10.0000	70.0000	20.0000	0.0
5AKI1276	0.0	15.0000	150.0000	30.0000	0.0	10.0000	70.0000	100.0000	0.0
6AKI1091	0.0	10.0000	30.0000	30.0000	0.0	10.0000	20.0000	20.0000	0.0
7AKI1092	0.0	20.0000	300.0000	50.0000	0.0	10.0000	50.0000	70.0000	0.0
8AKI1088	0.0	20.0000	100.0000	70.0000	0.0	10.0000	70.0000	30.0000	0.0
9AKI1087	0.0	30.0000	50.0000	100.0000	0.0	5.0000	10.0000	50.0000	30.0000
750 AKI1081	0.0	50.0000	100.0000	100.0000	0.0	7.0000	10.0000	70.0000	0.0

TABLE I

SAMPLE	SC PPM	SN PPM	SR PPM	W PPM	V PPM	Y PPM	ZN PPM	AU PPM
70' AK1312	15.0000	0.0	150.0000	150.0000	150.0000	15.0000	0.0	0.0200L
2 AK1313	15.0000	0.0	100.0000	100.0000	100.0000	0.0	L	100.0000
3 AK1105	15.0000	0.0	150.0000	150.0000	150.0000	0.0	L	200.0000
4 AK1104	15.0000	0.0	150.0000	150.0000	150.0000	0.0	L	70.0000
5 AK1317	15.0000	0.0	150.0000	150.0000	150.0000	0.0	L	150.0000
6 AK1318	15.0000	0.0	200.0000	150.0000	15.0000	0.0	L	0.0200L
7 AK1319	15.0000	0.0	300.0000	200.0000	20.0000	200.0000	0.0	0.0200L
8 AK1321	15.0000	0.0	300.0000	150.0000	15.0000	0.0	L	70.0000
5 AK1320	15.0000	0.0	300.0000	200.0000	20.0000	300.0000	100.0000	0.0200L
7/0 AK1316	15.0000	0.0	200.0000	200.0000	15.0000	0.0	L	100.0000
' AK1310	15.0000	0.0	150.0000	200.0000	15.0000	0.0	L	0.0200L
2 AK1308	15.0000	0.0	150.0000	200.0000	20.0000	200.0000	0.0	0.0200L
3 AK1311	15.0000	0.0	150.0000	200.0000	15.0000	0.0	L	200.0000
4 AK1309	15.0000	0.0	150.0000	200.0000	15.0000	0.0	L	200.0000
5 AK1306	15.0000	0.0	200.0000	150.0000	15.0000	0.0	L	0.0200L
6 AK1307	10.0000	0.0	150.0000	100.0000	10.0000	0.0	N	0.0200L
7 AK1305	20.0000	0.0	500.0000	150.0000	20.0000	200.0000	100.0000	0.0600L
8 AK1304	20.0000	0.0	500.0000	200.0000	20.0000	0.0	L	300.0000
' AK1301	15.0000	0.0	300.0000	150.0000	20.0000	0.0	L	200.0000
5 AK1302	15.0000	0.0	200.0000	200.0000	20.0000	0.0	L	100.0000
2 AK1303	20.0000	0.0	200.0000	200.0000	20.0000	0.0	L	70.0000
2 AK1300	15.0000	0.0	300.0000	200.0000	20.0000	200.0000	100.0000	0.0200L
3 AK1298	15.0000	0.0	300.0000	100.0000	10.0000	300.0000	70.0000	0.0200L
4 AK1299	15.0000	0.0	300.0000	200.0000	20.0000	300.0000	100.0000	0.0200L
5 AK1296	20.0000	15.0000	300.0000	200.0000	20.0000	300.0000	70.0000	0.1000
6 AK1297	20.0000	0.0	500.0000	150.0000	20.0000	200.0000	300.0000	0.0800
7 AK1294	20.0000	10.0000	500.0000	100.0000	10.0000	20.0000	0.0	0.0200L
8 AK1295	15.0000	0.0	300.0000	150.0000	20.0000	0.0	N	200.0000
' AK1103	15.0000	0.0	150.0000	150.0000	15.0000	0.0	L	70.0000
7/0 AK1102	10.0000	0.0	100.0000	150.0000	10.0000	0.0	L	100.0000
' AK1101	15.0000	0.0	200.0000	150.0000	20.0000	0.0	L	200.0000
2 AK1100	10.0000	0.0	100.0000	100.0000	10.0000	15.0000	0.0	0.0200L
3 AK1098	10.0000	0.0	100.0000	150.0000	10.0000	0.0	L	100.0000
VAK1097	7.0000	0.0	100.0000	100.0000	10.0000	0.0	L	70.0000
5 AK1089	15.0000	0.0	300.0000	150.0000	15.0000	0.0	L	70.0000
6 AK1096	10.0000	0.0	100.0000	150.0000	10.0000	0.0	L	70.0000
7 AK1273	15.0000	30.0000	150.0000	150.0000	15.0000	0.0	L	200.0000
8 AK1274	15.0000	0.0	150.0000	200.0000	15.0000	0.0	L	100.0000
' AK1095	15.0000	0.0	150.0000	200.0000	15.0000	0.0	L	150.0000
7/0 AK1090	15.0000	0.0	200.0000	150.0000	20.0000	200.0000	0.0	0.0400
' AK1094	10.0000	0.0	100.0000	150.0000	10.0000	0.0	L	70.0000
2 AK1093	10.0000	0.0	100.0000	150.0000	10.0000	0.0	L	70.0000
3 AK1092	10.0000	0.0	150.0000	100.0000	10.0000	0.0	L	70.0000
4 AK1275	15.0000	0.0	150.0000	200.0000	15.0000	0.0	L	150.0000
5 AK1276	15.0000	20.0000	200.0000	200.0000	20.0000	200.0000	0.0200L	70.0000
' AK1091	15.0000	0.0	200.0000	150.0000	15.0000	0.0	L	70.0000
7 AK1099	10.0000	0.0	150.0000	150.0000	15.0000	0.0	L	70.0000
8 AK1088	15.0000	0.0	150.0000	150.0000	15.0000	0.0	L	70.0000
5 AK1087	15.0000	0.0	200.0000	150.0000	15.0000	0.0	L	70.0000
7/0 AK1081	10.0000	0.0	150.0000	150.0000	15.0000	0.0	L	300.0000

TABLE 1

SAMPLE	FE PCT	CA PCT	MN PCT	TI PCT	AG PPM	AS PPM	BA PPM	BE PPM
75, AKI082	10.0000	1.5000	0.5000	0.5000	0.5000	0.0	300.0000	0.0
2, AKI083	10.0000	1.5000	1.5000	0.5000	0.5000	0.0	300.0000	1.0000
SAKI080	3.0000	1.0000	0.7000	0.2000	500.0000	0.0	300.0000	1.0000
4, AKI079	5.0000	1.5000	0.7000	0.2000	500.0000	0.0	300.0000	0.0
SAKI078	3.0000	1.0000	1.0000	0.3000	700.0000	0.0	300.0000	1.5000
6, AKI075	5.0000	1.0000	1.0000	0.3000	700.0000	0.0	300.0000	0.0
1, AKI077	3.0000	1.0000	1.0000	0.3000	700.0000	0.0	200.0000	0.0
8, AKI076	3.0000	1.5000	0.7000	0.2000	700.0000	0.0	300.0000	0.0
9, AKI074	3.0000	0.7000	0.7000	0.2000	300.0000	0.0	300.0000	1.5000
76, AKI073	3.0000	0.7000	0.7000	0.3000	500.0000	0.0	10.0000	300.0000
, AKI747	3.0000	1.0000	1.0000	0.5000	700.0000	0.0	30.0000	0.0
2, AKI746	3.0000	1.5000	1.5000	0.5000	700.0000	0.0	15.0000	300.0000
3, SAKA745	3.0000	1.5000	1.0000	0.5000	700.0000	0.0	10.0000	700.0000
YAKA744	7.0000	2.0000	1.5000	0.5000	1000.0000	0.0	30.0000	700.0000
SAKA749	3.0000	1.0000	0.7000	0.7000	700.0000	0.0	10.0000	300.0000
4, AKI743	10.0000	2.0000	1.5000	0.5000	1000.0000	0.0	0.0	1.5000
7, AKI750	3.0000	1.5000	0.7000	0.7000	700.0000	0.0	0.0	0.0
9, SAKA769	5.0000	1.5000	1.0000	0.3000	1000.0000	0.0	0.0	2.0000
9, AKAT752	3.0000	1.5000	0.7000	0.3000	700.0000	0.0	0.0	1.5000
SAKA754	5.0000	1.0000	0.7000	0.3000	500.0000	0.0	0.0	1.0000
, AKAT755	3.0000	1.0000	1.0000	0.3000	700.0000	0.0	0.0	1.0000
2, AKAT753	3.0000	1.5000	1.0000	0.7000	700.0000	0.0	0.0	1.0000
SAKA932	5.0000	1.5000	1.5000	0.5000	1000.0000	0.0	0.0	1.5000
YAKA927	5.0000	1.0000	0.5000	0.5000	700.0000	0.0	0.0	1.0000
SAKA928	7.0000	1.5000	1.5000	0.5000	1000.0000	0.0	0.0	1.5000
6, AKAT759	5.0000	1.5000	1.5000	0.7000	700.0000	0.0	0.0	0.0
7, AKAT929	7.0000	1.5000	1.0000	0.5000	1000.0000	0.0	0.0	1.5000
, SAKA926	3.0000	1.5000	0.5000	0.3000	500.0000	0.0	0.0	1.0000
9, AKAT756	5.0000	1.5000	1.5000	0.3000	1000.0000	0.0	0.0	1.0000
78, AKAT757	5.0000	1.5000	1.0000	0.5000	1000.0000	0.0	0.0	1.0000
, AKAT758	7.0000	1.5000	2.0000	0.7000	700.0000	0.0	0.0	1.0000
2, AKAT933	7.0000	1.5000	1.5000	0.5000	1000.0000	0.0	0.0	1.5000
3, SAKA930	5.0000	1.5000	1.0000	0.5000	1000.0000	0.0	0.0	1.5000
4, AKAT760	5.0000	2.0000	1.5000	0.7000	1000.0000	0.0	0.0	1.0000
5, SAKA931	5.0000	1.0000	1.0000	0.5000	1000.0000	0.0	0.0	1.5000
6, AKAT386	5.0000	3.0000	2.0000	0.3000	1000.0000	0.0	0.0	300.0000
7, AKAT385	3.0000	1.0000	1.5000	1.5000	200.0000	0.0	0.0	0.0
8, AKAT751	3.0000	1.5000	1.0000	0.3000	700.0000	0.0	0.0	1.0000
9, AKAT768	15.0000	2.0000	1.5000	0.7000	700.0000	1.0000	0.0	0.0
79, AKAT384	5.0000	1.5000	1.5000	0.3000	700.0000	1.5000	0.0	1.0000
, AKAT383	3.0000	1.5000	1.5000	0.2000	300.0000	0.0	0.0	1.0000
2, AKAT382	3.0000	1.5000	1.5000	0.3000	700.0000	1.0000	0.0	1.0000
3, SAKA381	3.0000	1.5000	1.5000	0.3000	700.0000	1.0000	0.0	1.0000
4, AKAT380	7.0000	1.5000	1.5000	0.3000	700.0000	2.0000	0.0	1.0000
5, SAKA379	5.0000	1.5000	2.0000	0.3000	1000.0000	1.5000	0.0	1.0000
6, AKAT378	5.0000	1.0000	2.0000	0.3000	1000.0000	1.5000	0.0	1.0000
7, AKAT377	3.0000	1.0000	1.0000	0.3000	700.0000	1.5000	0.0	0.0
8, SAKA377	3.0000	1.0000	1.0000	0.3000	500.0000	1.0000	0.0	0.0
9, AKAT375	3.0000	1.0000	0.7000	0.3000	300.0000	1.5000	0.0	0.0
80, SAKA377	7.0000	1.5000	1.5000	0.5000	700.0000	0.0	0.0	0.0

TABLE 1

SAMPLE	BI PPM	CD PPM	CR PPM	LA PPM	NB PPM	PB PPM	PPM
75 / AKA1062	0.0 N	10.0000	100.0000	0.0 N	10.0000	20.0000	0.0
1 AKA1083	0.0 N	30.0000	30.0000	0.0 N	10.0000	50.0000	0.0
3 AKA1080	0.0 N	10.0000	30.0000	0.0 N	0.0 L	30.0000	0.0
4 AKA1079	0.0 N	15.0000	30.0000	70.0000	0.0 N	10.0000	100.0000
5 AKA1078	0.0 N	0.0 L	15.0000	20.0000	0.0 N	10.0000	100.0000
6 AKA1075	0.0 N	15.0000	30.0000	70.0000	0.0 N	0.0 L	50.0000
7 AKA1077	0.0 N	10.0000	15.0000	50.0000	0.0 N	0.0 L	15.0000
8 AKA1076	0.0 N	10.0000	30.0000	50.0000	0.0 N	0.0 L	15.0000
9 AKA1074	0.0 N	5.0000	15.0000	10.0000	0.0 N	0.0 L	0.0
760 AKA1073	0.0 N	7.0000	20.0000	15.0000	30.0000	0.0 N	0.0
, AKA747	0.0 N	15.0000	30.0000	20.0000	0.0 L	10.0000	20.0000
1 AKA746	0.0 N	10.0000	30.0000	20.0000	30.0000	0.0 N	0.0
3 AKA745	0.0 N	7.0000	20.0000	50.0000	30.0000	0.0 N	0.0
4 AKA744	0.0 N	15.0000	70.0000	70.0000	20.0000	10.0000	100.0000
5 AKA749	0.0 N	20.0000	30.0000	70.0000	30.0000	0.0 N	0.0
6 AKA743	0.0 N	15.0000	70.0000	30.0000	20.0000	0.0 N	0.0
7 AKA750	0.0 N	15.0000	30.0000	50.0000	0.0 N	10.0000	20.0000
8 AKA769	0.0 N	10.0000	30.0000	30.0000	0.0 L	0.0 N	0.0
9 AKA752	0.0 N	15.0000	30.0000	30.0000	50.0000	10.0000	15.0000
770 AKA754	0.0 N	20.0000	30.0000	70.0000	0.0 N	10.0000	100.0000
, AKA755	0.0 N	7.0000	15.0000	70.0000	30.0000	20.0000	0.0
1 AKA753	0.0 N	20.0000	50.0000	50.0000	30.0000	0.0 N	0.0
3 AKA932	0.0 N	15.0000	30.0000	70.0000	0.0 N	10.0000	7.0000
4 AKA927	0.0 N	15.0000	50.0000	30.0000	0.0 N	10.0000	15.0000
5 AKA928	0.0 N	20.0000	50.0000	50.0000	0.0 N	10.0000	15.0000
6 AKA759	0.0 N	20.0000	30.0000	70.0000	0.0 N	10.0000	20.0000
7 AKA929	0.0 N	20.0000	70.0000	70.0000	0.0 N	10.0000	15.0000
8 AKA926	0.0 N	7.0000	50.0000	70.0000	0.0 N	0.0 L	5.0000
9 AKA756	0.0 N	20.0000	20.0000	30.0000	0.0 N	10.0000	15.0000
760 AKA757	0.0 N	20.0000	50.0000	50.0000	20.0000	0.0 N	0.0
, AKA758	0.0 N	20.0000	50.0000	100.0000	0.0 L	10.0000	20.0000
1 AKA933	15.0000	20.0000	50.0000	150.0000	0.0 L	15.0000	500.0000
3 AKA930	0.0 N	15.0000	30.0000	70.0000	0.0 N	10.0000	150.0000
4 AKA760	0.0 N	20.0000	30.0000	50.0000	20.0000	5.0000	70.0000
5 AKA931	10.0000	15.0000	30.0000	70.0000	0.0 N	10.0000	200.0000
6 AKA386	0.0 N	15.0000	20.0000	150.0000	0.0 L	10.0000	150.0000
7 AKA385	0.0 N	15.0000	20.0000	50.0000	0.0 L	10.0000	200.0000
8 AKA380	0.0 N	10.0000	30.0000	70.0000	30.0000	0.0 N	0.0
9 AKA768	0.0 N	20.0000	50.0000	100.0000	0.0 L	10.0000	150.0000
790 AKA384	0.0 N	15.0000	30.0000	70.0000	0.0 N	5.0000	100.0000
, AKA383	0.0 N	10.0000	15.0000	70.0000	20.0000	0.0 N	0.0
1 AKA382	0.0 N	15.0000	30.0000	50.0000	0.0 N	0.0 L	15.0000
2 AKA381	0.0 N	15.0000	30.0000	70.0000	30.0000	0.0 N	0.0
4 AKA380	0.0 N	20.0000	50.0000	200.0000	0.0 L	10.0000	150.0000
5 AKA379	20.0000	15.0000	30.0000	150.0000	0.0 L	5.0000	150.0000
6 AKA378	20.0000	15.0000	30.0000	70.0000	20.0000	7.0000	10.0000
7 AKA377	0.0 N	10.0000	20.0000	150.0000	0.0 L	10.0000	100.0000
8 AKA376	0.0 N	10.0000	15.0000	30.0000	0.0 N	10.0000	150.0000
9 AKA375	0.0 N	15.0000	30.0000	150.0000	0.0 N	10.0000	7.00000
800 AKA374	0.0 N	20.0000	50.0000	20.0000	10.0000	10.0000	15.0000

TABLE 1

SAMPLE	SC PPM	SN PPM	SR PPM	W PPM	Y PPM	ZN PPM	ZR PPM	AU PPM
75) AKI082	15.0000	0.0 N	150.0000	150.0000	0.0	0.0 L	70.0000	0.0800
2 AKI083	15.0000	0.0 N	300.0000	150.0000	0.0	15.0000	70.0000	0.0800
3 AKA1079	7.0000	0.0 L	200.0000	70.0000	0.0	10.0000	70.0000	0.0200L
4 AKI1079	7.0000	15.0000	150.0000	70.0000	0.0	10.0000	100.0000	0.0200L
5 AKI1078	7.0000	10.0000	200.0000	30.0000	0.0	10.0000	100.0000	0.0200L
6 AKI1075	7.0000	0.0 N	150.0000	100.0000	0.0	10.0000	0.0	0.0200L
7 AKI1077	7.0000	0.0 N	200.0000	70.0000	0.0	10.0000	0.0	0.0200L
8 AKI1076	7.0000	0.0 L	200.0000	100.0000	0.0	15.0000	70.0000	0.0200L
9 AKI1074	7.0000	0.0 L	150.0000	50.0000	0.0	15.0000	70.0000	0.0200L
76) AKI1073	10.0000	0.0 N	200.0000	150.0000	0.0	20.0000	0.0	0.0200L
1 AKA747	15.0000	0.0 L	200.0000	150.0000	0.0	20.0000	0.0	0.0200L
2 AKA746	15.0000	0.0 N	300.0000	100.0000	0.0	30.0000	0.0	0.0200L
3 AKA745	10.0000	0.0 L	300.0000	100.0000	0.0	20.0000	0.0	0.0200L
4 AKA744	15.0000	20.0000	300.0000	150.0000	0.0	30.0000	0.0	0.0200L
5 AKA749	15.0000	10.0000	200.0000	100.0000	0.0	15.0000	300.0000	0.0200L
6 AKA743	15.0000	10.0000	300.0000	150.0000	0.0	20.0000	200.0000	0.0200L
7 AKA750	15.0000	15.0000	200.0000	150.0000	0.0	20.0000	300.0000	0.0200L
8 AKA769	10.0000	10.0000	300.0000	150.0000	0.0	20.0000	200.0000	0.0200L
9 AKA752	15.0000	15.0000	200.0000	100.0000	0.0	15.0000	0.0	0.0200L
77) AKA754	10.0000	15.0000	200.0000	100.0000	0.0	20.0000	300.0000	0.0200L
, AKA755	10.0000	0.0 L	300.0000	70.0000	0.0	10.0000	0.0	0.0200L
1 AKA753	15.0000	15.0000	300.0000	150.0000	0.0	20.0000	200.0000	0.0200L
2 AKA932	15.0000	15.0000	300.0000	150.0000	0.0	20.0000	200.0000	0.0200L
3 AKA927	15.0000	10.0000	200.0000	150.0000	0.0	15.0000	70.0000	0.0200L
4 AKA928	15.0000	15.0000	300.0000	150.0000	0.0	20.0000	100.0000	0.0200L
5 AKA759	15.0000	0.0 L	300.0000	150.0000	0.0	10.0000	70.0000	0.0200L
6 AKA929	15.0000	15.0000	200.0000	150.0000	0.0	20.0000	15.0000	0.0200L
7 AKA926	15.0000	15.0000	150.0000	100.0000	0.0	10.0000	200.0000	0.0200L
8 AKA756	15.0000	0.0 L	300.0000	150.0000	0.0	15.0000	70.0000	0.0200L
9 AKA757	15.0000	15.0000	300.0000	150.0000	0.0	20.0000	200.0000	0.0200L
, AKA758	20.0000	30.0000	700.0000	150.0000	0.0	20.0000	300.0000	0.0200L
1 AKA933	15.0000	30.0000	200.0000	150.0000	0.0	20.0000	500.0000	0.0200L
2 AKA931	15.0000	15.0000	300.0000	150.0000	0.0	10.0000	0.0	0.0200L
3 AKA386	15.0000	15.0000	300.0000	150.0000	0.0	20.0000	500.0000	0.0200L
4 AKA385	10.0000	15.0000	500.0000	200.0000	0.0	15.0000	0.0	0.0200L
5 AKA751	15.0000	15.0000	300.0000	150.0000	0.0	15.0000	300.0000	0.0200L
6 AKA760	15.0000	10.0000	300.0000	150.0000	0.0	20.0000	300.0000	0.0200L
7 AKA384	15.0000	15.0000	300.0000	200.0000	0.0	15.0000	300.0000	0.0200L
8 AKA383	15.0000	10.0000	200.0000	70.0000	0.0	15.0000	0.0	0.0200L
9 AKA382	15.0000	20.0000	300.0000	150.0000	0.0	10.0000	300.0000	0.0200L
0 AKA381	15.0000	15.0000	300.0000	150.0000	0.0	15.0000	300.0000	0.0200L
1 AKA380	15.0000	15.0000	200.0000	200.0000	0.0	15.0000	200.0000	0.0200L
2 AKA379	15.0000	20.0000	300.0000	150.0000	0.0	20.0000	500.0000	0.0200L
3 AKA378	20.0000	0.0 L	500.0000	200.0000	0.0	15.0000	200.0000	0.0200L
4 AKA377	15.0000	30.0000	300.0000	150.0000	0.0	10.0000	70.0000	0.0200L
5 AKA376	10.0000	20.0000	200.0000	150.0000	0.0	10.0000	300.0000	0.0200L
6 AKA375	10.0000	20.0000	150.0000	150.0000	0.0	15.0000	70.0000	0.0200L
7 AKA374	15.0000	15.0000	300.0000	150.0000	0.0	10.0000	70.0000	0.0200L

TABLE 1

SAMPLE	FE PCT	MG PCT	CA PCT	MN PPM	AG PPM	AS PPM	B PPM	BA PPM	BE PPM
60 AKA373	5.0000	2.0000	0.3000	700.0000	0.0	N	30.0000	300.0000	1.0000
2 AKA766	7.0000	1.5000	1.5000	1000.0000	1.5000	0.0	10.0000	500.0000	1.5000
3 AKA761	5.0000	1.5000	1.5000	0.5000	1.5000	0.0	10.0000	300.0000	1.0000
4 AKA365	7.0000	2.0000	1.5000	1500.0000	0.5000	0.0	10.0000	500.0000	1.0000
SAK1145	3.0000	1.5000	1.5000	0.3000	1500.0000	0.0	10.0000	300.0000	1.0000
6 AKA767	7.0000	1.5000	1.5000	0.7000	0.0	0.0	0.0	0.0	0.0
7 AKA372	5.0000	2.0000	1.5000	700.0000	1.0000	0.0	0.0	300.0000	0.0
8 AKA367	5.0000	3.0000	1.5000	0.3000	1500.0000	0.0	30.0000	300.0000	0.0
9 AKA371	7.0000	2.0000	1.5000	1000.0000	0.5000	0.0	10.0000	500.0000	0.0
5 AKA764	5.0000	1.5000	1.5000	0.3000	500.0000	0.0	10.0000	300.0000	0.0
6 AKA368	3.0000	1.5000	1.5000	0.5000	700.0000	0.0	10.0000	500.0000	1.0000
1 AKA369	10.0000	3.0000	1.5000	0.5000	700.0000	0.0	10.0000	300.0000	0.0
2 AKA370	7.0000	2.0000	1.5000	0.5000	700.0000	0.0	10.0000	300.0000	0.0
3 AKA1146	7.0000	2.0000	1.5000	0.3000	1000.0000	0.0	0.0	300.0000	0.0
4 AKA1147	10.0000	3.0000	1.5000	0.5000	1500.0000	0.0	0.0	300.0000	0.0
5 AKA765	5.0000	1.5000	1.5000	0.5000	700.0000	0.0	10.0000	500.0000	1.0000
7 AKA522	5.0000	1.5000	1.5000	0.3000	700.0000	0.0	10.0000	300.0000	0.0
6 AKA521	5.0000	1.5000	1.5000	0.7000	1000.0000	0.0	0.0	300.0000	0.0
9 AKA762	5.0000	1.5000	1.5000	0.7000	0.0	0.0	0.0	0.0	0.0
5 AKA763	5.0000	1.5000	1.5000	0.5000	1000.0000	1.0000	10.0000	500.0000	1.5000
6 AKA765	5.0000	1.0000	1.5000	0.5000	700.0000	0.0	10.0000	300.0000	1.0000
7 AKA771	7.0000	1.5000	1.5000	0.3000	1000.0000	1.0000	10.0000	300.0000	1.0000
2 AKA772	7.0000	1.0000	1.5000	0.7000	1000.0000	0.0	0.0	300.0000	2.0000
3 AKA778	5.0000	1.0000	1.5000	0.3000	1000.0000	1.0000	0.0	300.0000	2.0000
4 AKA776	7.0000	1.5000	1.5000	0.3000	1000.0000	1.0000	0.0	700.0000	1.5000
5 AKA777	10.0000	1.0000	0.7000	0.3000	1000.0000	0.5000	0.0	300.0000	1.5000
6 AKA772	10.0000	1.5000	1.5000	0.3000	1000.0000	0.5000	20.0000	300.0000	2.0000
7 AKA773	5.0000	1.0000	0.7000	0.3000	1000.0000	0.0	0.0	300.0000	1.0000
8 AKA774	10.0000	1.5000	1.5000	0.3000	1000.0000	0.7000	0.0	500.0000	2.0000
9 AKA775	10.0000	1.5000	0.7000	0.3000	1500.0000	1.0000	0.0	100.0000	300.0000
10 AKA779	10.0000	1.0000	1.5000	0.5000	1500.0000	0.0	0.0	300.0000	2.0000
1 AKA80	5.0000	1.0000	0.7000	0.3000	1000.0000	0.0	0.0	300.0000	1.0000
2 AKA781	5.0000	1.0000	1.5000	0.3000	1000.0000	0.0	0.0	300.0000	1.5000
3 AKA790	15.0000	3.0000	2.0000	1.0000	1500.0000	0.0	70.0000	700.0000	1.5000
4 AKA782	10.0000	1.5000	1.5000	0.5000	1500.0000	0.7000	0.0	300.0000	2.0000
5 AKA783	10.0000	1.5000	1.5000	0.7000	1500.0000	0.0	0.0	300.0000	2.0000
6 AKA140	10.0000	7.0000	1.5000	0.5000	1500.0000	0.0	0.0	700.0000	1.5000
7 AKA739	10.0000	1.0000	1.5000	0.5000	1000.0000	0.0	0.0	700.0000	1.5000
8 AKA738	3.0000	0.5000	0.7000	0.3000	1500.0000	0.7000	0.0	15.0000	700.0000
9 AKA737	5.0000	1.5000	1.5000	0.5000	1500.0000	0.0	0.0	150.0000	1.5000
10 AKA733	3.0000	0.7000	1.5000	0.3000	700.0000	0.0	0.0	700.0000	0.0
1 AKA36	3.0000	0.3000	1.5000	0.2000	300.0000	0.0	0.0	150.0000	3.0000
2 AKA732	10.0000	3.0000	2.0000	0.5000	1000.0000	0.0	0.0	700.0000	1.5000
3 AKA734	3.0000	0.3000	0.5000	0.2000	300.0000	0.0	0.0	150.0000	2.0000
4 AKA735	3.0000	0.5000	0.7000	0.3000	500.0000	1.0000	0.0	150.0000	1.0000
5 AKA731	10.0000	1.5000	1.5000	0.5000	1500.0000	1.5000	0.0	700.0000	0.0
6 AKA30	5.0000	1.0000	1.5000	0.3000	500.0000	0.0	0.0	700.0000	1.5000
7 AKA728	5.0000	1.0000	1.5000	0.5000	3000.0000	0.0	0.0	100.0000	1.5000
8 AKA729	7.0000	1.5000	1.5000	0.5000	1000.0000	0.7000	0.0	30.0000	1.5000
9 AKA727	10.0000	1.5000	1.5000	0.5000	1000.0000	0.0	0.0	30.0000	1.5000
10 AKA726	10.0000	2.00000	2.0000	0.5000	1500.0000	0.7000	0.0	15.0000	1.5000

TABLE 1

SAMPLE	BI PPM	CO PPM	CR PPM	LA PPM	MO PPM	NI PPM	PB PPM	SB PPM	PPM
80, AKA373	0.0	N	20.0000	0.0	0.0	15.0000	70.0000	0.0	0.0
* AKA766	0.0	N	20.0000	30.0000	0.0	10.0000	30.0000	300.0000	0.0
SAKA761	0.0	N	20.0000	30.0000	0.0	10.0000	20.0000	300.0000	0.0
4AKA365	0.0	N	20.0000	50.0000	0.0	10.0000	20.0000	500.0000	0.0
SAK1145	0.0	N	15.0000	10.0000	0.0	0.0	0.0	0.0	0.0
6AKA767	0.0	N	20.0000	50.0000	0.0	0.0	0.0	0.0	0.0
* AKA372	0.0	N	15.0000	30.0000	0.0	10.0000	10.0000	700.0000	0.0
* AKA367	0.0	N	20.0000	50.0000	0.0	10.0000	10.0000	1000.0000	0.0
* AKA371	0.0	N	20.0000	70.0000	0.0	10.0000	15.0000	150.0000	0.0
* AKA368	0.0	N	10.0000	20.0000	0.0	0.0	0.0	150.0000	0.0
* AKA369	0.0	N	20.0000	50.0000	0.0	10.0000	10.0000	150.0000	0.0
2AKA370	0.0	N	15.0000	30.0000	0.0	10.0000	10.0000	150.0000	0.0
3AKA1146	0.0	N	20.0000	50.0000	0.0	10.0000	15.0000	50.0000	0.0
* AKA1147	0.0	N	20.0000	70.0000	0.0	10.0000	15.0000	70.0000	0.0
5AKA764	0.0	N	20.0000	30.0000	0.0	10.0000	30.0000	300.0000	0.0
6AKA765	0.0	N	15.0000	20.0000	0.0	0.0	10.0000	30.0000	0.0
* AKA522	0.0	N	10.0000	20.0000	0.0	0.0	0.0	15.0000	0.0
FAKA521	0.0	N	30.0000	70.0000	0.0	10.0000	10.0000	150.0000	0.0
* AKA762	0.0	N	15.0000	30.0000	0.0	10.0000	20.0000	300.0000	0.0
* AKA763	0.0	N	15.0000	30.0000	0.0	10.0000	20.0000	70.0000	0.0
* AKA770	0.0	N	10.0000	30.0000	0.0	0.0	10.0000	20.0000	500.0000
* AKA771	0.0	N	15.0000	20.0000	0.0	0.0	0.0	15.0000	0.0
3AKA778	0.0	N	10.0000	30.0000	0.0	0.0	15.0000	20.0000	50.0000
* AKA776	0.0	N	15.0000	30.0000	0.0	0.0	15.0000	20.0000	70.0000
5AKA777	0.0	N	15.0000	50.0000	0.0	0.0	15.0000	20.0000	70.0000
6AKA772	0.0	N	15.0000	70.0000	0.0	0.0	15.0000	20.0000	150.0000
7AKA773	0.0	N	15.0000	50.0000	0.0	10.0000	30.0000	20.0000	150.0000
FAKA774	0.0	N	10.0000	30.0000	0.0	0.0	15.0000	20.0000	100.0000
* AKA775	0.0	N	20.0000	50.0000	0.0	10.0000	20.0000	70.0000	0.0
5AKA779	0.0	N	15.0000	50.0000	0.0	10.0000	20.0000	30.0000	0.0
6AKA780	0.0	N	15.0000	20.0000	0.0	0.0	10.0000	15.0000	70.0000
* AKA781	0.0	N	15.0000	70.0000	0.0	0.0	15.0000	15.0000	30.0000
3AKA790	0.0	N	20.0000	30.0000	0.0	0.0	15.0000	20.0000	150.0000
* YAKA782	0.0	N	15.0000	30.0000	0.0	0.0	15.0000	20.0000	150.0000
SAKA783	0.0	N	15.0000	30.0000	0.0	0.0	10.0000	15.0000	150.0000
6AKA790	0.0	N	15.0000	30.0000	0.0	0.0	10.0000	15.0000	150.0000
* AKA793	0.0	N	15.0000	50.0000	0.0	0.0	10.0000	15.0000	150.0000
7AKA794	0.0	N	15.0000	70.0000	0.0	0.0	10.0000	15.0000	70.0000
3AKA795	0.0	N	20.0000	70.0000	0.0	0.0	10.0000	15.0000	70.0000
* AKA796	0.0	N	15.0000	30.0000	0.0	0.0	10.0000	15.0000	150.0000
7AKA797	0.0	N	15.0000	50.0000	0.0	0.0	10.0000	15.0000	150.0000
836AKA779	0.0	N	15.0000	70.0000	0.0	0.0	10.0000	15.0000	70.0000
74	840AKA733	0.0	N	10.0000	5.0000	0.0	0.0	15.0000	0.0
855AKA726	0.0	N	15.0000	30.0000	0.0	0.0	15.0000	5.0000	300.0000
2AKA732	0.0	N	0.0	15.0000	0.0	0.0	20.0000	30.0000	50.0000
3AKA734	0.0	N	0.0	7.0000	0.0	0.0	20.0000	5.0000	70.0000
YAKA735	0.0	N	0.0	15.0000	0.0	0.0	20.0000	5.0000	70.0000
SAKA731	0.0	N	20.0000	30.0000	0.0	0.0	7.0000	30.0000	500.0000
4AKA730	0.0	N	10.0000	30.0000	15.0000	50.0000	0.0	15.0000	50.0000
* AKA736	0.0	N	20.0000	30.0000	10.0000	50.0000	0.0	15.0000	50.0000
2AKA732	0.0	N	0.0	10.0000	5.0000	30.0000	0.0	15.0000	50.0000
3AKA734	0.0	N	0.0	7.0000	0.0	30.0000	0.0	5.0000	70.0000
YAKA735	0.0	N	0.0	15.0000	0.0	30.0000	0.0	5.0000	70.0000
SAKA731	0.0	N	20.0000	30.0000	150.0000	7.0000	0.0	10.0000	30.0000
4AKA730	0.0	N	10.0000	30.0000	15.0000	50.0000	0.0	15.0000	50.0000
* AKA736	0.0	N	20.0000	30.0000	10.0000	50.0000	0.0	15.0000	50.0000
7AKA728	0.0	N	15.0000	70.0000	0.0	20.0000	0.0	10.0000	30.0000
8AKA729	0.0	N	15.0000	70.0000	0.0	20.0000	0.0	15.0000	70.0000
* AKA727	0.0	N	15.0000	50.0000	30.0000	20.0000	0.0	15.0000	50.0000
855AKA726	0.0	N	15.0000	50.0000	20.0000	20.0000	7.0000	10.0000	300.0000

TABLE I

SAMPLE	SC PPM	SR PPM	V PPM	Y PPM	ZN PPM	AU PPM
20/AKA373	15.0000	500.0000	150.0000	20.0000	0.0	0.0200L
2 ZAKAT66	15.0000	70.0000	300.0000	150.0000	20.0000	0.0200L
3 ZAKAT61	15.0000	15.0000	300.0000	150.0000	0.0	0.0200L
4 ZAKAT65	15.0000	20.0000	300.0000	200.0000	20.0000	0.0200L
5 SAKAT45	10.0000	0.0	300.0000	100.0000	0.0	0.0200L
6 ZAKAT67	15.0000	0.0	300.0000	200.0000	10.0000	0.0200L
7 AKA372	15.0000	15.0000	300.0000	150.0000	0.0	0.0200L
8 AKA366	15.0000	15.0000	300.0000	200.0000	0.0	0.0200L
9 AKA371	15.0000	10.0000	300.0000	200.0000	0.0	0.0200L
10/ AKA368	10.0000	0.0	300.0000	150.0000	0.0	0.0200L
1 AKA369	15.0000	15.0000	300.0000	300.0000	0.0	0.0200L
2 AKA370	15.0000	0.0	300.0000	200.0000	0.0	0.0200L
3 AK1146	15.0000	0.0	300.0000	200.0000	0.0	0.0200L
4 AK1147	15.0000	0.0	300.0000	150.0000	0.0	0.0200L
5 SAKAT64	15.0000	0.0	300.0000	150.0000	0.0	0.0200L
6 ZAKAT65	15.0000	0.0	300.0000	150.0000	0.0	0.0200L
7 ZAKA522	15.0000	0.0	300.0000	150.0000	0.0	0.0200L
8 AKA521	15.0000	0.0	300.0000	150.0000	0.0	0.0200L
9 ZAKAT62	15.0000	0.0	300.0000	150.0000	0.0	0.0200L
10/ AKA63	15.0000	0.0	300.0000	150.0000	0.0	0.0200L
11 AKA770	15.0000	30.0000	300.0000	150.0000	0.0	0.0200L
12 ZAKAT71	15.0000	300.0000	200.0000	150.0000	0.0	0.0200L
13 ZAKAT78	10.0000	10.0000	200.0000	150.0000	0.0	0.0200L
14 ZAKAT76	15.0000	0.0	300.0000	150.0000	0.0	0.0200L
15 SAKAT77	15.0000	15.0000	200.0000	150.0000	0.0	0.0200L
16 ZAKA77	15.0000	15.0000	300.0000	200.0000	0.0	0.0200L
17 CAKA772	15.0000	15.0000	300.0000	200.0000	0.0	0.0200L
18 ZAKAT73	15.0000	0.0	150.0000	150.0000	0.0	0.0200L
19 ZAKA774	15.0000	0.0	300.0000	150.0000	0.0	0.0200L
20 ZAKAT75	15.0000	30.0000	300.0000	150.0000	0.0	0.0200L
21 SAKA779	15.0000	0.0	300.0000	200.0000	0.0	0.0200L
22 ZAKA772	15.0000	15.0000	300.0000	200.0000	0.0	0.0200L
23 ZAKAT80	10.0000	0.0	150.0000	150.0000	0.0	0.0200L
24 ZAKAT81	15.0000	20.0000	200.0000	150.0000	0.0	0.0200L
25 ZAKAT79	30.0000	15.0000	300.0000	300.0000	0.0	0.0200L
26 ZAKAT82	15.0000	30.0000	300.0000	200.0000	0.0	0.0200L
27 SAKA83	15.0000	70.0000	300.0000	200.0000	0.0	0.0200L
28 ZAKAT40	15.0000	20.0000	300.0000	100.0000	0.0	0.0200L
29 ZAKAT39	15.0000	0.0	200.0000	150.0000	0.0	0.0200L
30 ZAKAT738	10.0000	0.0	300.0000	30.0000	0.0	0.0200L
31 ZAKAT737	15.0000	10.0000	500.0000	100.0000	0.0	0.0200L
32 SAKA733	5.0000	0.0	150.0000	30.0000	0.0	0.0200L
33 ZAKAT36	0.0	10.0000	0.0	15.0000	0.0	0.0200L
34 ZAKAT32	20.0000	0.0	300.0000	150.0000	0.0	0.0200L
35 ZAKA734	0.0	0.0	0.0	0.0	0.0	0.0200L
36 ZAKAT35	5.0000	0.0	0.0	0.0	0.0	0.0200L
37 ZAKA731	20.0000	10.0000	500.0000	150.0000	0.0	0.0200L
38 ZAKA730	15.0000	10.0000	300.0000	70.0000	0.0	0.0200L
39 ZAKAT28	15.0000	10.0000	300.0000	70.0000	0.0	0.0200L
40 ZAKA729	20.0000	15.0000	300.0000	100.0000	0.0	0.0200L
41 ZAKAT27	15.0000	10.0000	300.0000	100.0000	0.0	0.0200L
42 ZAKAT26	15.0000	0.0	300.0000	150.0000	0.0	0.0200L

TABLE 1

SAMPLE	FE PCT	MG PCT	CA PCT	MN PPM	AS PPM	B PPM	BA PPM	BE PPM
85 <sup>a</sup> AKA725	7.0000	1.0000	1.5000	0.5000	700.0000	50.0000	700.0000	2.0000
7 <sup>b</sup> AKA724	3.0000	0.7000	0.7000	0.2000	500.0000	30.0000	500.0000	1.5000
3 <sup>c</sup> AKA723	7.0000	1.0000	1.5000	0.5000	1000.0000	0.0	N	1.0000
YAKA722	5.0000	1.0000	1.5000	0.7000	1500.0000	0.0	N	1.0000
YAKA720	5.0000	1.0000	1.0000	0.7000	700.0000	0.0	N	1.0000
6 <sup>d</sup> AKA721	3.0000	0.7000	1.0000	0.2000	700.0000	0.0	N	1.0000
7 <sup>e</sup> AKA756	5.0000	3.0000	2.0000	0.5000	1000.0000	0.0	L	1.0000
8AKI57	10.0000	5.0000	3.0000	0.5000	1500.0000	0.0	N	1.0000
9AKI58	7.0000	3.0000	1.5000	0.2000	1000.0000	0.0	N	1.0000
86 <sup>f</sup> AKI59	5.0000	3.0000	2.0000	0.5000	700.0000	0.0	N	1.0000
1 <sup>g</sup> AKI560	7.0000	3.0000	2.0000	0.5000	1000.0000	0.0	L	1.0000
2 <sup>h</sup> AKI561	5.0000	3.0000	1.5000	0.5000	1000.0000	0.0	L	1.0000
3 <sup>i</sup> AKI562	15.0000	3.0000	2.0000	0.7000	1000.0000	0.0	L	1.0000
4AKI563	15.0000	3.0000	1.5000	0.2000	1000.0000	0.0	N	1.0000
5AKI581	15.0000	3.0000	3.0000	0.7000	1500.0000	0.0	N	1.0000
6AKI582	15.0000	3.0000	2.0000	0.5000	1000.0000	1.5000	200.0000	2.0000
7AKI583	10.0000	3.0000	2.0000	0.5000	1000.0000	0.7000	0.0	1.0000
8AKI553	5.0000	3.0000	1.5000	0.5000	1000.0000	1.5000	300.0000	3.0000
9AKI586	7.0000	3.0000	2.0000	0.5000	700.0000	0.0	N	1.0000
87 <sup>j</sup> AKI585	1.5000	0.7000	1.0000	0.1500	150.0000	0.0	N	1.5000
1 <sup>k</sup> AKI584	3.0000	1.5000	1.5000	0.7000	1500.0000	0.0	N	1.0000
2 <sup>l</sup> AKI554	10.0000	3.0000	2.0000	0.5000	700.0000	0.0	N	1.0000
3 <sup>m</sup> AKI552	10.0000	3.0000	1.5000	0.5000	1500.0000	0.0	N	1.0000
4 <sup>n</sup> AKI555	10.0000	3.0000	3.0000	0.5000	1500.0000	0.0	N	1.0000
5AKI551	15.0000	7.0000	3.0000	0.7000	1500.0000	0.0	N	1.5000
6AKI550	7.0000	2.0000	1.5000	0.7000	1000.0000	0.5000	300.0000	3.0000
7AKI549	15.0000	2.0000	1.5000	0.7000	1000.0000	0.0	N	1.5000
8AKI548	10.0000	1.5000	1.0000	0.5000	1500.0000	0.0	N	1.5000
9AKI547	10.0000	2.0000	1.5000	0.7000	1500.0000	0.0	N	1.5000
88 <sup>o</sup> AKI546	10.0000	5.0000	2.0000	0.7000	1500.0000	0.0	N	3.0000
1 <sup>p</sup> AKI544	15.0000	7.0000	3.0000	0.5000	1500.0000	0.0	N	1.5000
2 <sup>q</sup> AKI545	10.0000	5.0000	2.0000	1.5000	1500.0000	0.0	N	3.0000
3 <sup>r</sup> AKI541	15.0000	5.0000	5.0000	0.7000	1500.0000	0.0	N	2.0000
4 <sup>s</sup> AKI543	10.0000	3.0000	1.5000	0.7000	1500.0000	0.0	N	2.0000
5AKI542	15.0000	1.5000	1.0000	0.5000	2000.0000	0.0	N	1.5000
6AKI375	7.0000	0.5000	1.0000	0.5000	1000.0000	0.0	N	1.0000
7AKI374	5.0000	1.5000	1.0000	0.5000	1500.0000	0.0	N	1.0000
8AKI372	15.0000	3.0000	2.0000	0.7000	1500.0000	0.0	N	1.0000
9AKI366	10.0000	3.0000	2.0000	0.5000	1000.0000	0.5000	200.0000	2.0000
89 <sup>t</sup> AKI360	10.0000	5.0000	2.0000	0.5000	1500.0000	0.0	N	1.5000
1 <sup>u</sup> AKI361	5.0000	3.0000	2.0000	3.0000	1500.0000	0.0	N	1.0000
2 <sup>v</sup> AKI362	15.0000	5.0000	1.5000	1.5000	1500.0000	0.5000	1000.0000	2.0000
3 <sup>w</sup> AKI363	10.0000	3.0000	2.0000	0.5000	1000.0000	0.0	N	1.0000
4 <sup>x</sup> AKI364	5.0000	3.0000	2.0000	0.3000	1000.0000	0.0	N	1.0000
5AKI365	2.0000	1.0000	1.5000	0.3000	700.0000	0.5000	700.0000	1.5000
6AKI358	5.0000	3.0000	2.0000	0.3000	1000.0000	0.0	N	1.0000
7AKI357	3.0000	3.0000	2.0000	0.7000	1500.0000	0.5000	1000.0000	1.0000
8AKI359	10.0000	5.0000	2.0000	0.5000	1500.0000	0.0	N	1.5000
9AKI351	15.0000	5.0000	2.0000	0.7000	1500.0000	0.0	N	1.5000
10 <sup>y</sup> AKI350	10.0000	7.0000	3.0000	0.7000	3000.0000	1.0000	500.0000	2.0000

TABLE I

SAMPLE	BI PPM	CO PPM	CR PPM	LA PPM	NI PPM	PB PPM	SB PPM
85,AK1725	0.0	10.0000	30.0000	100.0000	20.0000	15.0000	0.0
2AK1724	0.0	5.0000	15.0000	70.0000	0.0	0.0	0.0
3AKA723	0.0	10.0000	30.0000	30.0000	150.0000	10.0000	70.0000
4AK1722	0.0	7.0000	50.0000	30.0000	0.0	10.0000	200.0000
SAKA720	0.0	5.0000	30.0000	5.0000	0.0	10.0000	20.0000
6AKA721	0.0	0.0	30.0000	5.0000	0.0	0.0	10.0000
7AK1556	0.0	30.0000	30.0000	70.0000	0.0	0.0	30.0000
8AK1557	0.0	50.0000	200.0000	70.0000	50.0000	100.0000	0.0
9AK1558	0.0	30.0000	150.0000	100.0000	0.0	10.0000	30.0000
AK1559	0.0	30.0000	100.0000	150.0000	30.0000	10.0000	30.0000
/AK1560	0.0	30.0000	150.0000	100.0000	100.0000	10.0000	70.0000
AK1561	0.0	30.0000	150.0000	70.0000	30.0000	10.0000	70.0000
AK1562	0.0	30.0000	150.0000	200.0000	30.0000	10.0000	70.0000
YAK1563	0.0	30.0000	150.0000	200.0000	30.0000	10.0000	70.0000
SAK1581	0.0	30.0000	100.0000	150.0000	30.0000	10.0000	70.0000
6AK1582	0.0	30.0000	150.0000	200.0000	0.0	10.0000	50.0000
7AK1583	0.0	30.0000	150.0000	150.0000	50.0000	10.0000	70.0000
8AK1584	0.0	30.0000	150.0000	100.0000	0.0	10.0000	50.0000
2AK1585	0.0	20.0000	70.0000	70.0000	0.0	10.0000	50.0000
3AK1586	0.0	0.0	30.0000	10.0000	20.0000	0.0	10.0000
YAK1587	0.0	30.0000	100.0000	100.0000	0.0	10.0000	50.0000
SAK1588	0.0	30.0000	70.0000	100.0000	0.0	10.0000	50.0000
AK1589	0.0	20.0000	70.0000	50.0000	20.0000	10.0000	50.0000
3AK1590	0.0	30.0000	150.0000	70.0000	0.0	10.0000	50.0000
YAK1591	0.0	30.0000	70.0000	30.0000	0.0	10.0000	50.0000
AK1592	0.0	50.0000	300.0000	70.0000	30.0000	10.0000	50.0000
AK1593	0.0	50.0000	300.0000	70.0000	30.0000	10.0000	50.0000
AK1594	0.0	70.0000	500.0000	50.0000	0.0	10.0000	50.0000
2AK1595	0.0	50.0000	500.0000	20.0000	50.0000	10.0000	50.0000
3AK1596	0.0	50.0000	500.0000	70.0000	0.0	10.0000	50.0000
YAK1597	0.0	30.0000	150.0000	20.0000	20.0000	10.0000	50.0000
SAK1598	0.0	50.0000	300.0000	70.0000	30.0000	15.0000	50.0000
AK1599	0.0	70.0000	100.0000	100.0000	0.0	10.0000	50.0000
6AK1375	0.0	30.0000	200.0000	50.0000	0.0	10.0000	10.0000
7AK1376	0.0	20.0000	70.0000	30.0000	0.0	10.0000	10.0000
8AK1377	0.0	30.0000	150.0000	70.0000	0.0	10.0000	10.0000
3AK1378	0.0	30.0000	300.0000	30.0000	20.0000	0.0	10.0000
SAK1366	0.0	15.0000	150.0000	50.0000	0.0	10.0000	150.0000
5AK1365	0.0	7.0000	70.0000	70.0000	30.0000	0.0	10.0000
6AK1360	0.0	30.0000	200.0000	20.0000	0.0	10.0000	300.0000
AK1361	0.0	30.0000	150.0000	30.0000	0.0	10.0000	100.0000
2AK1362	0.0	30.0000	150.0000	30.0000	0.0	10.0000	50.0000
3AK1363	0.0	15.0000	150.0000	50.0000	0.0	10.0000	50.0000
SAK1364	0.0	30.0000	300.0000	50.0000	0.0	10.0000	50.0000
5AK1365	0.0	7.0000	70.0000	70.0000	30.0000	0.0	10.0000
6AK1366	0.0	30.0000	200.0000	20.0000	0.0	10.0000	150.0000
7AK1367	0.0	30.0000	150.0000	30.0000	0.0	10.0000	10.0000
8AK1368	0.0	30.0000	300.0000	50.0000	0.0	10.0000	20.0000
3AK1369	0.0	30.0000	300.0000	70.0000	20.0000	0.0	30.0000
5AK1370	0.0	20.0000	150.0000	50.0000	0.0	10.0000	70.0000
6AK1371	0.0	30.0000	300.0000	70.0000	20.0000	0.0	10.0000
7AK1372	0.0	30.0000	150.0000	50.0000	0.0	10.0000	150.0000
8AK1373	0.0	30.0000	300.0000	70.0000	20.0000	0.0	30.0000
9AK1374	0.0	30.0000	150.0000	30.0000	0.0	10.0000	10.0000
0AK1375	0.0	30.0000	300.0000	70.0000	20.0000	0.0	10.0000
1AK1376	0.0	30.0000	150.0000	30.0000	0.0	10.0000	10.0000
2AK1377	0.0	30.0000	300.0000	70.0000	20.0000	0.0	10.0000
3AK1378	0.0	30.0000	150.0000	30.0000	0.0	10.0000	10.0000
4AK1379	0.0	30.0000	300.0000	70.0000	20.0000	0.0	10.0000
5AK1380	0.0	30.0000	150.0000	30.0000	0.0	10.0000	10.0000
6AK1381	0.0	30.0000	300.0000	70.0000	20.0000	0.0	10.0000
7AK1382	0.0	30.0000	150.0000	30.0000	0.0	10.0000	10.0000
8AK1383	0.0	30.0000	300.0000	70.0000	20.0000	0.0	10.0000
9AK1384	0.0	30.0000	150.0000	30.0000	0.0	10.0000	10.0000
0AK1385	0.0	30.0000	300.0000	70.0000	20.0000	0.0	10.0000
1AK1386	0.0	30.0000	150.0000	30.0000	0.0	10.0000	10.0000
2AK1387	0.0	30.0000	300.0000	70.0000	20.0000	0.0	10.0000
3AK1388	0.0	30.0000	150.0000	30.0000	0.0	10.0000	10.0000
4AK1389	0.0	30.0000	300.0000	70.0000	20.0000	0.0	10.0000
5AK1390	0.0	30.0000	150.0000	30.0000	0.0	10.0000	10.0000

TABLE 1

SAMPLE	SC PPM	SN PPM	SR PPM	W PPM	V PPM	Y PPM	ZN PPM	AU PPM
85, AKA725	15.0000	10.0000	300.0000	100.0000	100.0000	20.0000	150.0000	0.0200L
AKA724	5.0000	15.0000	200.0000	30.0000	0.0	10.0000	0.0	0.0200L
3 AKA723	15.0000	10.0000	500.0000	70.0000	0.0	30.0000	0.0	0.0200L
4 AKA722	15.0000	0.0	300.0000	100.0000	0.0	20.0000	0.0	0.0200L
SAKA720	15.0000	0.0	200.0000	150.0000	0.0	15.0000	0.0	0.0200L
6 AKA721	7.0000	0.0	200.0000	70.0000	0.0	10.0000	0.0	0.0200L
7 AKI56	15.0000	0.0	500.0000	200.0000	0.0	15.0000	0.0	0.0200L
8 AKI557	20.0000	0.0	700.0000	200.0000	0.0	30.0000	0.0	0.0200L
9 AKI558	15.0000	0.0	300.0000	150.0000	0.0	20.0000	0.0	0.0200L
89, AKI559	20.0000	30.0000	700.0000	200.0000	0.0	30.0000	0.0	0.2000
, AKI560	20.0000	0.0	700.0000	150.0000	0.0	20.0000	0.0	0.1000
*AKI561	15.0000	0.0	700.0000	150.0000	0.0	20.0000	0.0	0.0600
9 AKI562	20.0000	15.0000	500.0000	150.0000	0.0	30.0000	0.0	0.1000
Y AKI563	15.0000	30.0000	500.0000	150.0000	0.0	30.0000	0.0	0.1000
SAK1581	30.0000	15.0000	500.0000	200.0000	0.0	50.0000	0.0	0.0200L
6 AKI582	15.0000	10.0000	500.0000	150.0000	0.0	20.0000	0.0	0.1000
Y AKI583	15.0000	10.0000	500.0000	150.0000	0.0	20.0000	0.0	0.0200L
F AKI583	15.0000	10.0000	500.0000	150.0000	0.0	20.0000	0.0	0.0400
Y AKI586	15.0000	0.0	500.0000	150.0000	0.0	20.0000	0.0	0.0200L
87, AKI585	5.0000	0.0	300.0000	20.0000	0.0	10.0000	0.0	0.0200L
, AKI584	15.0000	0.0	700.0000	70.0000	0.0	20.0000	0.0	0.0200L
1 AKI554	15.0000	0.0	700.0000	150.0000	0.0	30.0000	0.0	0.0200L
3 AKI552	20.0000	0.0	700.0000	200.0000	0.0	20.0000	0.0	0.0200L
Y AKI555	20.0000	0.0	700.0000	300.0000	0.0	20.0000	0.0	0.0200L
SAK1551	30.0000	0.0	500.0000	200.0000	0.0	20.0000	0.0	0.0200L
6 AKI550	30.0000	0.0	500.0000	300.0000	0.0	20.0000	0.0	0.0200L
7 AKI549	30.0000	0.0	300.0000	300.0000	0.0	30.0000	0.0	0.0200L
F AKI548	20.0000	0.0	300.0000	300.0000	0.0	20.0000	0.0	0.0200L
9 AKI547	20.0000	0.0	300.0000	300.0000	0.0	30.0000	0.0	0.0200L
SAK1546	30.0000	0.0	500.0000	300.0000	0.0	30.0000	0.0	0.0200L
88, AKI544	30.0000	0.0	700.0000	200.0000	0.0	30.0000	0.0	0.0200L
, AKI544	30.0000	0.0	700.0000	150.0000	0.0	30.0000	0.0	0.0200L
*AKI545	30.0000	0.0	700.0000	200.0000	0.0	50.0000	0.0	0.0200L
3 AKI541	30.0000	0.0	500.0000	200.0000	0.0	30.0000	0.0	0.0400
Y AKI543	15.0000	0.0	300.0000	150.0000	0.0	20.0000	0.0	0.0200L
SAK1542	30.0000	0.0	300.0000	300.0000	0.0	30.0000	0.0	0.0200L
4 AKI375	20.0000	0.0	200.0000	150.0000	0.0	20.0000	0.0	0.0200L
7 AKI374	15.0000	0.0	200.0000	150.0000	0.0	15.0000	0.0	0.0200L
F AKI372	15.0000	0.0	300.0000	200.0000	0.0	50.0000	0.0	0.0200L
Y AKI366	15.0000	0.0	500.0000	150.0000	0.0	15.0000	0.0	0.0200L
SAK1365	5.0000	10.0000	300.0000	150.0000	0.0	20.0000	0.0	0.0200L
6 AKI358	15.0000	0.0	500.0000	150.0000	0.0	15.0000	0.0	0.0200L
, AKI361	15.0000	0.0	700.0000	200.0000	0.0	30.0000	0.0	0.0200L
*AKI362	20.0000	0.0	500.0000	200.0000	0.0	15.0000	0.0	0.0200L
3 AKI363	20.0000	0.0	500.0000	200.0000	0.0	15.0000	0.0	0.0200L
Y AKI364	15.0000	0.0	500.0000	150.0000	0.0	15.0000	0.0	0.0200L
SAK1365	5.0000	10.0000	300.0000	150.0000	0.0	20.0000	0.0	0.0200L
6 AKI358	15.0000	0.0	500.0000	150.0000	0.0	15.0000	0.0	0.0200L
, AKI357	15.0000	0.0	300.0000	150.0000	0.0	15.0000	0.0	0.0200L
*AKI359	15.0000	0.0	500.0000	150.0000	0.0	15.0000	0.0	0.0200L
Y AKI351	15.0000	0.0	500.0000	200.0000	0.0	15.0000	0.0	0.0200L
89, AKI350	15.0000	0.0	500.0000	150.0000	0.0	20.0000	0.0	0.0200L

TABLE 1

SAMPLE	FE PCT	CA PCT	MN PPM	AS PPM	B PPM	BA PPM	BE PPM
90/AKI1348	15.0000	2.0000	1500.0000	700.0000	100.0000	500.0000	1.0000
2AK1353	15.0000	7.0000	1500.0000	1500.0000	150.0000	700.0000	1.0000
3AK1352	7.0000	3.0000	1500.0000	300.0000	200.0000	700.0000	2.0000
4AK1349	10.0000	5.0000	1500.0000	0.0	200.0000	500.0000	3.0000
5AK1343	10.0000	2.0000	1500.0000	0.7000	0.0	70.0000	1.5000
6AK1346	10.0000	5.0000	1500.0000	1.5000	0.0	70.0000	2.0000
7AK1347	10.0000	7.0000	1500.0000	0.7000	0.0	70.0000	2.0000
8AK1340	15.0000	1.5000	1500.0000	2.0000	150.0000	700.0000	2.0000
9AK1345	7.0000	3.0000	1000.0000	0.0	20.0000	700.0000	1.5000
0/CAK1344	7.0000	5.0000	1000.0000	0.7000	0.0	500.0000	2.0000
/AKI1339	5.0000	2.0000	1500.0000	0.3000	30.0000	700.0000	1.0000
2AK1355	5.0000	3.0000	1500.0000	1.0000	0.0	70.0000	1.5000
3AK1354	3.0000	1.0000	1500.0000	0.2000	500.0000	1000.0000	2.0000
4AK1356	1.5000	1.0000	1000.0000	0.7000	0.0	700.0000	1.0000
5AK1435	10.0000	3.0000	1500.0000	0.5000	0.0	1500.0000	3.0000
6AK1436	10.0000	3.0000	1500.0000	0.7000	0.0	70.0000	2.0000
7AK1437	7.0000	3.0000	1500.0000	0.3000	0.0	70.0000	1.0000
8AK1438	2.0000	0.7000	1500.0000	0.1500	0.0	700.0000	3.0000
9AK1439	1.5000	0.7000	1000.0000	0.1500	0.0	500.0000	3.0000
0/0AK1440	3.0000	0.7000	1.0000	0.2000	300.0000	300.0000	3.0000
1/AK1367	1.5000	0.7000	1.5000	0.2000	300.0000	100.0000	700.0000
2AK1371	15.0000	7.0000	1.0000	1.0000	0.0	70.0000	1.5000.0000
3AK1368	1.5000	0.7000	1.5000	0.2000	300.0000	0.7000	700.0000
YAK1369	3.0000	1.0000	1.5000	0.2000	500.0000	30.0000	700.0000
SAKI1448	15.0000	3.0000	2.0000	0.7000	1500.0000	3000.0000	150.0000
6AK1370	2.0000	0.7000	1.5000	0.1500	500.0000	0.0	50.0000
7AK1442	10.0000	1.5000	1.5000	0.5000	700.0000	1.0000	50.0000
8AK1441	1.0000	0.5000	1.0000	0.1000	200.0000	0.0	150.0000
9AK1443	1.5000	0.7000	1.0000	0.2000	150.0000	0.0	70.0000
0/0AK1444	3.0000	1.0000	1.0000	0.3000	700.0000	0.7000	100.0000
'AK1445	5.0000	2.0000	1.5000	0.5000	1000.0000	1.0000	100.0000
2AK1446	3.0000	1.5000	1.5000	0.2000	700.0000	1.5000	20.0000
3AK1447	15.0000	3.0000	2.0000	0.7000	2000.0000	0.5000	300.0000
YAK1373	15.0000	3.0000	2.0000	0.7000	1500.0000	0.0	15.0000
SAK1377	5.0000	2.0000	1.5000	0.3000	1000.0000	0.0	50.0000
6AK1376	3.0000	1.5000	1.5000	0.3000	700.0000	0.0	30.0000
7AK1378	5.0000	2.0000	1.5000	0.3000	700.0000	0.0	20.0000
8AK1540	15.0000	3.0000	2.0000	0.7000	1500.0000	0.7000	70.0000
9AK1539	10.0000	5.0000	5.0000	0.7000	1500.0000	0.0	30.0000
0/0AK1538	5.0000	1.5000	1.5000	0.7000	700.0000	0.0	30.0000
'AK1537	7.0000	2.0000	1.5000	0.5000	1500.0000	1.5000	30.0000
7AK1536	10.0000	2.0000	1.5000	0.3000	700.0000	1.5000	20.0000
3AK1409	3.0000	1.0000	0.7000	0.3000	700.0000	0.0	50.0000
4AK1410	3.0000	1.5000	0.7000	0.3000	700.0000	1.5000	50.0000
5AK1411	10.0000	2.0000	1.5000	0.7000	1000.0000	0.0	30.0000
6AK1412	5.0000	1.0000	1.5000	0.2000	1000.0000	0.0	30.0000
7AK1413	5.0000	3.0000	1.0000	0.3000	1000.0000	1.0000	30.0000
8AK1414	5.0000	2.0000	0.7000	0.3000	700.0000	0.0	30.0000
9AK1416	7.0000	1.5000	1.0000	0.3000	1000.0000	0.0	30.0000
0/0AK1415	7.0000	1.5000	1.5000	0.3000	700.0000	0.0	30.0000

TABLE 1

SAMPLE	BI PPM	CO PPM	CR PPM	CU PPM	LA PPM	NB PPM	MO PPM	NI PPM	PB PPM	PPM
90/AK1348	0.0	N	150.0000	100.0000	0.0	50.0000	0.0	50.0000	50.0000	0.0
2AK1353	0.0	N	30.0000	500.0000	0.0	10.0000	150.0000	150.0000	50.0000	0.0
3AK1352	0.0	N	20.0000	150.0000	0.0	10.0000	70.0000	70.0000	70.0000	0.0
YAK1349	0.0	N	20.0000	150.0000	70.0000	10.0000	50.0000	50.0000	50.0000	0.0
SAK1343	0.0	N	50.0000	700.0000	0.0	10.0000	150.0000	30.0000	30.0000	0.0
6AK1346	0.0	N	30.0000	300.0000	70.0000	20.0000	0.0	10.0000	30.0000	0.0
7AK1347	0.0	N	50.0000	300.0000	150.0000	30.0000	0.0	10.0000	70.0000	0.0
8AK1340	0.0	N	30.0000	150.0000	200.0000	20.0000	0.0	10.0000	100.0000	0.0
9AK1345	0.0	N	20.0000	150.0000	50.0000	0.0	10.0000	70.0000	70.0000	0.0
90AK1344	0.0	N	30.0000	300.0000	30.0000	0.0	10.0000	100.0000	30.0000	0.0
7AK1339	0.0	N	20.0000	150.0000	30.0000	0.0	10.0000	50.0000	50.0000	0.0
2AK1355	0.0	N	15.0000	200.0000	150.0000	20.0000	0.0	10.0000	100.0000	0.0
3AK1354	0.0	N	10.0000	50.0000	150.0000	0.0	0.0	0.0	30.0000	0.0
YAK1356	0.0	L	0.0	30.0000	100.0000	0.0	0.0	0.0	50.0000	0.0
SAK1355	0.0	N	30.0000	150.0000	150.0000	100.0000	0.0	10.0000	30.0000	0.0
6AK1436	0.0	N	20.0000	70.0000	100.0000	20.0000	0.0	10.0000	30.0000	0.0
7AK1437	0.0	N	20.0000	150.0000	70.0000	50.0000	0.0	0.0	20.0000	0.0
8AK1438	0.0	N	0.0	10.0000	100.0000	50.0000	0.0	0.0	15.0000	0.0
9AK1439	0.0	N	0.0	15.0000	150.0000	70.0000	0.0	0.0	150.0000	0.0
920AK1440	0.0	N	5.0000	20.0000	70.0000	20.0000	10.0000	0.0	10.0000	30.0000
1AK1367	0.0	N	5.0000	50.0000	20.0000	0.0	0.0	0.0	15.0000	0.0
2AK1371	0.0	N	70.0000	700.0000	70.0000	30.0000	5.0000	15.0000	200.0000	30.0000
3AK1368	0.0	N	0.0	50.0000	70.0000	20.0000	0.0	0.0	10.0000	0.0
YAK1369	0.0	N	0.0	70.0000	30.0000	20.0000	0.0	0.0	50.0000	0.0
SAK1448	0.0	N	30.0000	150.0000	500.0000	50.0000	5.0000	15.0000	70.0000	300.0000
6AK1370	0.0	N	0.0	50.0000	30.0000	20.0000	0.0	0.0	10.0000	50.0000
7AK1442	0.0	N	30.0000	70.0000	100.0000	20.0000	0.0	15.0000	30.0000	0.0
8AK1441	0.0	N	5.0000	10.0000	10.0000	30.0000	0.0	0.0	7.0000	0.0
9AK1443	0.0	N	0.0	15.0000	5.0000	0.0	0.0	0.0	10.0000	0.0
90AK1444	0.0	N	0.0	30.0000	30.0000	150.0000	10.0000	10.0000	10.0000	30.0000
1AK1445	0.0	N	20.0000	70.0000	50.0000	0.0	0.0	0.0	30.0000	0.0
2AK1446	0.0	N	30.0000	70.0000	200.0000	30.0000	0.0	0.0	30.0000	0.0
3AK1447	0.0	N	30.0000	150.0000	150.0000	0.0	15.0000	70.0000	70.0000	0.0
YAK1373	0.0	N	50.0000	100.0000	100.0000	0.0	10.0000	100.0000	30.0000	0.0
SAK1377	0.0	N	20.0000	300.0000	50.0000	20.0000	0.0	10.0000	100.0000	0.0
6AK1376	0.0	N	15.0000	150.0000	15.0000	0.0	0.0	0.0	50.0000	0.0
7AK1378	0.0	N	20.0000	70.0000	50.0000	0.0	0.0	0.0	50.0000	0.0
8AK1540	0.0	N	30.0000	100.0000	70.0000	0.0	0.0	0.0	100.0000	0.0
YAK1379	0.0	N	30.0000	50.0000	70.0000	0.0	0.0	0.0	50.0000	0.0
SAK1411	0.0	N	30.0000	150.0000	70.0000	0.0	0.0	0.0	100.0000	0.0
6AK1412	0.0	N	30.0000	150.0000	70.0000	0.0	0.0	0.0	100.0000	0.0
7AK1413	0.0	N	20.0000	100.0000	150.0000	0.0	0.0	0.0	100.0000	0.0
8AK1409	0.0	N	15.0000	100.0000	50.0000	0.0	0.0	0.0	50.0000	0.0
YAK1410	0.0	N	10.0000	150.0000	30.0000	20.0000	0.0	0.0	30.0000	150.0000
SAK1411	0.0	N	20.0000	150.0000	150.0000	0.0	0.0	0.0	150.0000	0.0
6AK1412	0.0	N	30.0000	70.0000	70.0000	0.0	0.0	0.0	100.0000	0.0
7AK1413	0.0	N	20.0000	700.0000	150.0000	30.0000	0.0	0.0	150.0000	70.0000
8AK1414	0.0	N	15.0000	150.0000	50.0000	0.0	0.0	0.0	30.0000	0.0
YAK1416	0.0	N	50.0000	70.0000	70.0000	0.0	0.0	0.0	70.0000	30.0000
90AK1415	0.0	N	70.0000	150.0000	200.0000	0.0	0.0	0.0	150.0000	70.0000

TABLE 1

SAMPLE	SC PPM	SR PPM	V PPM	Y PPM	ZN PPM	LR PPM	AU PPM
90/AK1348	15.0000	300.0000	150.0000	0.0	0.0	70.0000	0.0400
2AK1353	15.0000	10.0000	300.0000	200.0000	0.0	70.0000	0.0800
3AK1352	15.0000	10.0000	300.0000	200.0000	0.0	100.0000	0.0600
4AK1349	15.0000	0.0	500.0000	150.0000	0.0	70.0000	0.0200L
5AK1343	20.0000	0.0	300.0000	150.0000	0.0	20.0000	0.0200L
6AK1346	15.0000	0.0	300.0000	150.0000	0.0	15.0000	0.0200L
7AK1347	20.0000	0.0	700.0000	200.0000	200.0000	70.0000	0.0200L
8AK1340	15.0000	0.0	300.0000	150.0000	200.0000	200.0000	0.0200L
9AK1345	15.0000	0.0	300.0000	150.0000	0.0	15.0000	0.0200L
9/OAK1344	15.0000	0.0	300.0000	150.0000	0.0	20.0000	0.0200L
/AK1339	10.0000	0.0	300.0000	100.0000	0.0	15.0000	0.0200L
2AK1355	15.0000	0.0	300.0000	150.0000	20.0000	70.0000	0.0600
3AK1354	5.0000	0.0	300.0000	70.0000	10.0000	500.0000	1.0000
YAK1356	5.0000	0.0	300.0000	30.0000	10.0000	200.0000	0.5000
SAK1435	20.0000	0.0	1000.0000	150.0000	30.0000	70.0000	0.0800
6AK1436	15.0000	0.0	700.0000	200.0000	0.0	15.0000	0.1000
2AK1437	15.0000	0.0	700.0000	150.0000	20.0000	100.0000	0.1000
8AK1438	0.0	L	500.0000	30.0000	10.0000	200.0000	0.2000
9AK1439	0.0	L	300.0000	30.0000	10.0000	500.0000	1.1000
92+AK1440	0.0	L	500.0000	30.0000	10.0000	200.0000	0.5000
/AK1367	5.0000	0.0	300.0000	30.0000	10.0000	150.0000	0.1000
2AK1371	30.0000	0.0	300.0000	200.0000	30.0000	700.0000	0.0400
3AK1368	7.0000	0.0	300.0000	30.0000	10.0000	500.0000	0.0600
YAK1369	7.0000	0.0	300.0000	30.0000	10.0000	500.0000	0.0200L
SAK1448	15.0000	0.0	700.0000	200.0000	30.0000	150.0000	0.4000
6AK1370	7.0000	0.0	300.0000	30.0000	10.0000	1000.0000	0.1400
7AK1442	15.0000	0.0	300.0000	150.0000	20.0000	100.0000	0.0600
8AK1441	0.0	L	500.0000	20.0000	0.0	200.0000	0.0200L
9AK1443	0.0	L	700.0000	20.0000	0.0	150.0000	0.0200L
93+AK1444	5.0000	0.0	500.0000	50.0000	20.0000	700.0000	0.4000
/AK1445	15.0000	0.0	700.0000	150.0000	20.0000	300.0000	0.0800
2AK1446	10.0000	0.0	500.0000	50.0000	20.0000	15.0000	0.1000
3AK1447	20.0000	0.0	700.0000	30.0000	30.0000	300.0000	0.0800
4AK1373	15.0000	0.0	300.0000	200.0000	15.0000	70.0000	0.0800
SAK1377	15.0000	0.0	500.0000	150.0000	20.0000	70.0000	0.0200L
6AK1376	15.0000	0.0	300.0000	100.0000	15.0000	70.0000	0.0200L
7AK1378	15.0000	0.0	300.0000	150.0000	10.0000	70.0000	0.0200L
8AK1540	20.0000	0.0	700.0000	300.0000	20.0000	200.0000	0.0200L
9AK1539	15.0000	0.0	700.0000	200.0000	10.0000	100.0000	0.0200L
96 AK1538	15.0000	0.0	300.0000	200.0000	15.0000	70.0000	0.0200L
/AK1537	15.0000	0.0	500.0000	200.0000	20.0000	100.0000	0.0200L
2AK1536	15.0000	0.0	300.0000	150.0000	30.0000	300.0000	0.5000
3AK1409	10.0000	0.0	300.0000	70.0000	15.0000	200.0000	0.0200L
4AK1410	10.0000	0.0	300.0000	70.0000	10.0000	70.0000	0.0200L
5AK1411	15.0000	0.0	300.0000	150.0000	15.0000	200.0000	0.0200L
6AK1412	15.0000	0.0	500.0000	150.0000	15.0000	70.0000	0.0200L
7AK1413	15.0000	10.0000	300.0000	150.0000	0.0	70.0000	0.0200L
8AK1414	15.0000	0.0	300.0000	150.0000	0.0	70.0000	0.0200L
9AK1416	15.0000	0.0	300.0000	200.0000	15.0000	70.0000	0.0200L
950-AK1415	15.0000	0.0	300.0000	150.0000	0.0	70.0000	0.0200L

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TABLE 1

SAMPLE	FE PCT	MG PCT	CA PCT	TI PCT	MN PPM	AS PPM	B PPM	BA PPM	BE PPM
95 AK1418	5.0000	1.5000	0.3000	700.0000	0.0	N	200.0000	150.0000	1.0000
2 AK1282	15.0000	5.0000	1.5000	1.0000	2000.0000	0.0	L	50.0000	700.0000
3 AK1283	15.0000	3.0000	1.5000	0.7000	2000.0000	0.0	L	50.0000	700.0000
4 AK1284	7.0000	3.0000	1.5000	0.7000	1500.0000	0.0	L	300.0000	1000.0000
5 AK1285	5.0000	1.5000	1.5000	0.5000	1500.0000	0.0	N	15.0000	700.0000
6 AK1286	10.0000	3.0000	1.0000	0.7000	3000.0000	2.0000	0.0	300.0000	300.0000
7 AK1287	5.0000	3.0000	2.0000	0.5000	1000.0000	0.0	N	200.0000	100.0000
8 AK1289	10.0000	3.0000	1.5000	0.7000	1500.0000	0.0	N	50.0000	700.0000
9 AK1288	10.0000	3.0000	2.0000	0.7000	1500.0000	0.0	N	200.0000	700.0000
0 AK1291	10.0000	2.0000	1.5000	0.7000	700.0000	0.5000	0.0	30.0000	700.0000
1 AK1290	5.0000	3.0000	1.5000	0.5000	1000.0000	0.0	N	300.0000	100.0000
2 AK1292	10.0000	3.0000	2.0000	0.7000	1000.0000	0.0	N	300.0000	100.0000
3 AK1293	3.0000	3.0000	1.5000	0.5000	1000.0000	0.5000	0.0	50.0000	700.0000
4 AK1281	7.0000	1.5000	0.7000	0.5000	1500.0000	1.0000	0.0	30.0000	700.0000
5 AK1277	5.0000	1.5000	1.5000	0.7000	1500.0000	1.0000	0.0	30.0000	700.0000
6 AK1278	7.0000	2.0000	1.5000	0.7000	1500.0000	1.0000	0.0	20.0000	700.0000
7 AK1279	7.0000	1.5000	0.7000	0.7000	1500.0000	0.0	N	30.0000	700.0000
8 AK1280	5.0000	1.0000	0.7000	0.7000	1500.0000	0.0	N	50.0000	700.0000
9 AK1086	5.0000	1.5000	1.5000	0.5000	1000.0000	0.0	N	10.0000	300.0000
0 AK1420	15.0000	1.5000	0.7000	0.5000	1500.0000	1.0000	0.0	150.0000	500.0000
1 AK1085	7.0000	1.5000	1.5000	0.5000	2000.0000	0.0	L	50.0000	300.0000
2 AK1084	7.0000	1.5000	0.7000	0.5000	700.0000	0.5000	0.0	30.0000	300.0000
3 AK1424	15.0000	1.5000	1.0000	0.5000	700.0000	1.0000	0.0	150.0000	300.0000
4 AK1423	5.0000	1.5000	0.7000	0.3000	1000.0000	0.0	N	0.0	300.0000
5 AK1422	10.0000	1.5000	0.7000	0.5000	1500.0000	1.5000	0.0	30.0000	500.0000
6 AK1421	7.0000	1.5000	0.7000	0.3000	2000.0000	0.0	L	200.0000	200.0000
7 AK1419	10.0000	1.5000	1.0000	0.5000	1500.0000	0.5000	0.0	200.0000	200.0000
8 AK1425	7.0000	1.5000	1.0000	0.7000	1000.0000	0.0	N	300.0000	300.0000
9 AK1426	7.0000	1.0000	1.0000	0.5000	700.0000	0.0	N	150.0000	300.0000
0 AK1417	10.0000	1.5000	0.7000	0.5000	1500.0000	0.0	N	50.0000	500.0000
1 AK1427	3.0000	0.7000	0.7000	0.3000	500.0000	0.0	N	200.0000	300.0000
2 AK1406	5.0000	1.0000	0.7000	0.3000	700.0000	0.0	N	30.0000	300.0000
3 AK1407	3.0000	1.0000	0.7000	0.3000	1000.0000	0.0	N	15.0000	300.0000
4 AK1408	3.0000	1.0000	0.7000	0.3000	1000.0000	0.0	N	50.0000	300.0000
5 AK1387	1.0000	0.5000	0.7000	0.1000	300.0000	0.0	N	0.0	300.0000
6 AK1388	10.0000	1.0000	1.5000	1.5000	1500.0000	0.3000	0.0	50.0000	700.0000
7 AK1389	10.0000	1.0000	1.5000	1.5000	1000.0000	0.3000	0.0	15.0000	500.0000
8 AK1405	3.0000	1.0000	1.5000	1.5000	1000.0000	0.3000	0.0	10.0000	300.0000
9 AK1391	3.0000	1.0000	1.5000	1.0000	500.0000	0.2000	0.0	0.0	300.0000
0 AK1392	3.0000	1.0000	1.5000	1.5000	700.0000	0.3000	0.0	10.0000	300.0000
1 AK1390	3.0000	1.0000	1.0000	0.7000	2000.0000	0.2000	0.0	0.0	300.0000
2 AK1404	5.0000	1.0000	1.5000	1.5000	1000.0000	0.3000	0.0	20.0000	300.0000
3 AK1401	5.0000	1.0000	1.5000	1.5000	1000.0000	0.3000	0.0	50.0000	300.0000
4 AK1402	7.0000	1.0000	1.5000	1.5000	1000.0000	0.3000	0.0	30.0000	500.0000
5 AK1403	7.0000	1.0000	1.5000	1.0000	1000.0000	1.5000	0.0	20.0000	300.0000
6 AK1399	3.0000	1.0000	1.0000	1.5000	1000.0000	0.3000	0.0	0.0	300.0000
7 AK1398	3.0000	1.0000	1.5000	1.5000	1000.0000	0.3000	0.0	30.0000	300.0000
8 AK1397	3.0000	1.0000	1.5000	1.5000	1000.0000	0.2000	0.0	0.0	300.0000
9 AK1393	5.0000	1.0000	1.5000	1.5000	1000.0000	0.3000	0.0	10.0000	300.0000
0 AK1400	3.0000	0.7000	1.0000	1.5000	1000.0000	0.2000	0.0	0.0	300.0000

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TABLE 1

SAMPLE	BI PPM	CO PPM	CR PPM	CU PPM	LA PPM	NB PPM	MO PPM	NI PPM	PB PPM	SB PPM	N
AKI1418	0.0	20.0000	150.0000	50.0000	0.0	0.0	0.0	10.0000	30.0000	0.0	0.0
AKI1422	0.0	30.0000	300.0000	70.0000	0.0	0.0	0.0	10.0000	150.0000	0.0	0.0
AKI1283	0.0	30.0000	150.0000	70.0000	0.0	0.0	0.0	10.0000	150.0000	0.0	0.0
AKI1284	0.0	20.0000	300.0000	70.0000	0.0	0.0	0.0	10.0000	20.0000	0.0	0.0
AKI1285	0.0	15.0000	50.0000	30.0000	0.0	0.0	0.0	10.0000	30.0000	0.0	0.0
AKI1286	0.0	30.0000	150.0000	300.0000	0.0	0.0	0.0	10.0000	100.0000	0.0	0.0
AKI1287	0.0	20.0000	300.0000	50.0000	20.0000	0.0	0.0	10.0000	100.0000	30.0000	0.0
AKI1289	0.0	20.0000	150.0000	50.0000	0.0	0.0	0.0	10.0000	50.0000	30.0000	0.0
AKI1288	0.0	30.0000	300.0000	70.0000	20.0000	0.0	0.0	10.0000	150.0000	30.0000	0.0
AKI1291	0.0	15.0000	150.0000	100.0000	0.0	0.0	0.0	10.0000	100.0000	70.0000	0.0
AKI1290	0.0	15.0000	300.0000	50.0000	0.0	0.0	0.0	10.0000	70.0000	20.0000	0.0
AKI1292	0.0	30.0000	300.0000	100.0000	0.0	0.0	0.0	10.0000	150.0000	30.0000	0.0
AKI1293	0.0	20.0000	300.0000	30.0000	20.0000	0.0	0.0	10.0000	100.0000	30.0000	0.0
AKI1281	0.0	50.0000	100.0000	70.0000	0.0	0.0	0.0	10.0000	150.0000	70.0000	0.0
SAKI177	0.0	15.0000	70.0000	30.0000	0.0	0.0	0.0	10.0000	50.0000	100.0000	0.0
AKI1278	0.0	15.0000	70.0000	50.0000	0.0	0.0	0.0	10.0000	50.0000	100.0000	0.0
AKI1279	0.0	15.0000	150.0000	30.0000	0.0	0.0	0.0	10.0000	50.0000	20.0000	0.0
AKI1280	0.0	15.0000	150.0000	30.0000	0.0	0.0	0.0	10.0000	50.0000	15.0000	0.0
AKI1086	0.0	10.0000	20.0000	15.0000	0.0	0.0	0.0	0.0	30.0000	15.0000	0.0
AKI1420	0.0	70.0000	150.0000	70.0000	0.0	0.0	0.0	10.0000	150.0000	50.0000	0.0
AKI1085	0.0	30.0000	50.0000	100.0000	0.0	0.0	0.0	10.0000	70.0000	70.0000	0.0
AKI1084	0.0	20.0000	30.0000	70.0000	0.0	0.0	0.0	10.0000	100.0000	30.0000	0.0
AKI1424	0.0	20.0000	30.0000	300.0000	0.0	0.0	0.0	10.0000	300.0000	50.0000	0.0
YAKI123	0.0	15.0000	50.0000	30.0000	0.0	0.0	0.0	10.0000	30.0000	50.0000	0.0
AKI1422	0.0	70.0000	150.0000	200.0000	0.0	0.0	0.0	10.0000	150.0000	70.0000	0.0
AKI1421	0.0	50.0000	70.0000	150.0000	0.0	0.0	0.0	0.0	100.0000	50.0000	0.0
AKI1419	0.0	30.0000	70.0000	150.0000	0.0	0.0	0.0	10.0000	100.0000	70.0000	0.0
AKI1425	0.0	50.0000	70.0000	200.0000	0.0	0.0	0.0	10.0000	50.0000	30.0000	0.0
AKI1426	0.0	20.0000	50.0000	150.0000	0.0	0.0	0.0	10.0000	30.0000	30.0000	0.0
AKI1417	0.0	30.0000	100.0000	100.0000	0.0	0.0	0.0	10.0000	70.0000	30.0000	0.0
AKI1427	0.0	10.0000	20.0000	70.0000	0.0	0.0	0.0	10.0000	20.0000	30.0000	0.0
AKI1406	0.0	15.0000	70.0000	70.0000	0.0	0.0	0.0	0.0	30.0000	30.0000	0.0
AKI1407	0.0	10.0000	50.0000	30.0000	0.0	0.0	0.0	0.0	15.0000	70.0000	0.0
YAKI1408	0.0	15.0000	50.0000	50.0000	0.0	0.0	0.0	10.0000	50.0000	30.0000	0.0
AKI1387	0.0	0.0	0.0	7.0000	0.0	0.0	0.0	0.0	7.0000	20.0000	0.0
AKI1388	0.0	30.0000	50.0000	70.0000	0.0	0.0	0.0	10.0000	10.0000	30.0000	0.0
AKI1389	0.0	20.0000	70.0000	50.0000	30.0000	0.0	0.0	10.0000	20.0000	30.0000	0.0
AKI1405	0.0	10.0000	30.0000	30.0000	0.0	0.0	0.0	10.0000	15.0000	30.0000	0.0
AKI1391	0.0	7.0000	30.0000	20.0000	0.0	0.0	0.0	10.0000	50.0000	20.0000	0.0
AKI1392	0.0	7.0000	50.0000	10.0000	0.0	0.0	0.0	10.0000	10.0000	30.0000	0.0
AKI1390	0.0	0.0	0.0	20.0000	7.0000	0.0	0.0	0.0	0.0	10.0000	0.0
AKI1404	0.0	15.0000	20.0000	100.0000	20.0000	0.0	0.0	0.0	15.0000	30.0000	0.0
AKI1401	0.0	10.0000	30.0000	70.0000	0.0	0.0	0.0	10.0000	15.0000	30.0000	0.0
AKI1402	0.0	20.0000	70.0000	150.0000	0.0	0.0	0.0	10.0000	20.0000	70.0000	0.0
AKI1403	0.0	30.0000	70.0000	200.0000	0.0	0.0	0.0	10.0000	20.0000	70.0000	0.0
AKI1399	0.0	10.0000	30.0000	70.0000	0.0	0.0	0.0	0.0	15.0000	70.0000	0.0
AKI1398	0.0	7.0000	30.0000	70.0000	0.0	0.0	0.0	0.0	15.0000	50.0000	0.0
AKI1397	0.0	5.0000	30.0000	50.0000	20.0000	0.0	0.0	0.0	15.0000	50.0000	0.0
AKI1393	0.0	10.0000	30.0000	70.0000	0.0	0.0	0.0	0.0	15.0000	70.0000	0.0
AKI1400	0.0	0.0	15.0000	0.0	0.0	0.0	0.0	0.0	7.0000	30.0000	0.0

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TABLE 1

SAMPLE	SC PPM	SN PPM	SR PPM	W PPM	V PPM	Y PPM	ZN PPM	ZR PPM	AU PPM
96 <sup>1</sup> AK1418	15.0000	0.0	N	150.0000	150.0000	15.0000	200.0000	70.0000	0.0200
2 AK1282	15.0000	0.0	N	300.0000	200.0000	0.0	20.0000	150.0000	0.0400
3 AK1283	20.0000	15.0000	L	200.0000	300.0000	0.0	20.0000	300.0000	0.0200L
4 AK1284	15.0000	0.0	N	300.0000	150.0000	15.0000	0.0	70.0000	0.0800
5 AK1285	15.0000	0.0	N	300.0000	150.0000	15.0000	0.0	70.0000	0.0200L
6 AK1286	20.0000	0.0	N	200.0000	300.0000	20.0000	300.0000	70.0000	0.0200L
7 AK1287	15.0000	0.0	N	150.0000	150.0000	15.0000	0.0	100.0000	0.0200L
8 AK1288	15.0000	0.0	N	300.0000	200.0000	20.0000	20.0000	150.0000	0.0200L
9 AK1289	20.0000	0.0	N	300.0000	150.0000	20.0000	0.0	100.0000	0.0200L
0 AK1291	15.0000	0.0	N	300.0000	150.0000	15.0000	0.0	70.0000	0.0200L
1 AK1290	15.0000	0.0	N	300.0000	150.0000	20.0000	0.0	200.0000	0.0400
2 AK1292	20.0000	0.0	N	300.0000	200.0000	20.0000	0.0	100.0000	0.0800
3 AK1293	15.0000	0.0	N	300.0000	150.0000	20.0000	0.0	150.0000	0.0600
4 AK1281	15.0000	0.0	N	200.0000	200.0000	20.0000	0.0	100.0000	0.0200L
5 AK1277	15.0000	0.0	N	300.0000	150.0000	15.0000	200.0000	70.0000	0.0200L
6 AK1278	15.0000	0.0	N	300.0000	150.0000	15.0000	300.0000	70.0000	0.0200L
7 AK1279	15.0000	0.0	N	150.0000	300.0000	0.0	20.0000	0.0	0.0400L
8 AK1280	15.0000	0.0	N	200.0000	150.0000	0.0	20.0000	100.0000	0.0200L
9 AK1086	10.0000	0.0	N	300.0000	150.0000	0.0	10.0000	200.0000	0.0200L
0 AK1420	15.0000	0.0	N	150.0000	150.0000	0.0	15.0000	200.0000	0.0200L
1 AK1085	10.0000	0.0	N	300.0000	150.0000	0.0	300.0000	70.0000	0.1000
2 AK1084	15.0000	0.0	N	150.0000	300.0000	0.0	15.0000	200.0000	0.0200L
3 AK1424	15.0000	10.0000	L	300.0000	150.0000	0.0	20.0000	100.0000	0.0200L
4 AK1423	10.0000	0.0	N	200.0000	150.0000	0.0	10.0000	70.0000	0.0200L
5 AK1422	15.0000	10.0000	L	200.0000	150.0000	0.0	15.0000	70.0000	0.0200L
6 AK1421	15.0000	0.0	N	150.0000	150.0000	0.0	15.0000	70.0000	0.0200L
7 AK1419	15.0000	0.0	N	300.0000	150.0000	0.0	15.0000	200.0000	0.0200L
8 AK1425	15.0000	0.0	N	200.0000	200.0000	0.0	15.0000	150.0000	0.0400
9 AK1426	15.0000	0.0	N	200.0000	150.0000	0.0	15.0000	100.0000	0.2000
0 AK1417	15.0000	0.0	N	200.0000	200.0000	0.0	15.0000	70.0000	0.0600
1 AK1427	7.0000	0.0	L	200.0000	70.0000	0.0	15.0000	70.0000	0.0200L
2 AK1406	15.0000	0.0	N	200.0000	100.0000	0.0	15.0000	150.0000	0.0200L
3 AK1407	15.0000	0.0	N	150.0000	70.0000	0.0	15.0000	70.0000	0.0200L
4 AK1408	15.0000	0.0	N	150.0000	100.0000	0.0	15.0000	300.0000	0.0200L
5 AK1387	0.0	0.0	N	150.0000	15.0000	10.0000	10.0000	70.0000	0.0200L
6 AK1388	15.0000	0.0	N	200.0000	200.0000	20.0000	0.0	100.0000	0.0200L
7 AK1389	20.0000	0.0	N	300.0000	200.0000	20.0000	0.0	150.0000	0.0200L
8 AK1405	15.0000	0.0	N	200.0000	100.0000	50.0000	0.0	300.0000	0.0200L
9 AK1391	10.0000	0.0	N	200.0000	100.0000	20.0000	0.0	100.0000	0.0600
0 AK1392	15.0000	0.0	N	300.0000	100.0000	20.0000	0.0	70.0000	0.0200L
1 AK1390	5.0000	0.0	L	150.0000	30.0000	15.0000	0.0	200.0000	0.0200L
2 AK1404	10.0000	0.0	N	200.0000	100.0000	0.0	20.0000	150.0000	0.0200L
3 AK1401	15.0000	10.0000	L	200.0000	100.0000	50.0000	0.0	300.0000	0.0200L
4 AK1402	15.0000	30.0000	L	300.0000	150.0000	20.0000	0.0	100.0000	0.0200L
5 AK1403	15.0000	15.0000	L	150.0000	150.0000	20.0000	0.0	70.0000	0.0200L
6 AK1399	15.0000	15.0000	L	300.0000	100.0000	15.0000	0.0	70.0000	0.0200L
7 AK1398	10.0000	15.0000	L	300.0000	100.0000	15.0000	0.0	15.0000	0.0200L
8 AK1397	15.0000	15.0000	L	300.0000	100.0000	15.0000	0.0	70.0000	0.0200L
9 AK1393	15.0000	15.0000	L	300.0000	150.0000	20.0000	0.0	70.0000	0.0200L
0 AK1400	7.0000	15.0000	L	300.0000	100.0000	15.0000	0.0	200.0000	0.0200L

TABLE 1

SAMPLE	FE PCT	CA PCT	MN PPM	AS PPM	B PPM	BA PPM	BE PPM
1001 AKI394	2.0000	0.7000	300.0000	0.0	0.0	300.0000	1.0000
2 AKI395	3.0000	1.0000	300.0000	0.0	0.0	300.0000	1.0000
3 AKI396	3.0000	1.0000	300.0000	0.0	0.0	300.0000	0.0
JAK1383	5.0000	1.5000	300.0000	0.0	0.0	300.0000	1.0000
SAK1382	7.0000	1.5000	1000.0000	0.0	20.0000	300.0000	0.0
6AKI384	5.0000	1.0000	1000.0000	0.0	20.0000	300.0000	0.0
7 AKI388	7.0000	1.5000	1000.0000	0.0	15.0000	300.0000	0.0
8 AKI380	10.0000	2.0000	0.3000	0.0	20.0000	300.0000	0.0
9 AKI379	5.0000	2.0000	0.3000	0.0	30.0000	300.0000	0.0
/0/0 AKI386	7.0000	1.5000	0.7000	0.0	20.0000	300.0000	0.0
/AKI385	5.0000	1.5000	0.5000	0.0	15.0000	500.0000	0.0
2 AKI534	15.0000	2.0000	3.0000	0.0	15.0000	500.0000	0.0
3 AKI533	15.0000	2.0000	2.0000	0.0	15.0000	700.0000	0.0
4AKI535	15.0000	2.0000	1.5000	0.0	15.0000	700.0000	1.5000
SAK1532	15.0000	3.0000	3.0000	0.0	30.0000	700.0000	1.0000
6AKI531	15.0000	3.0000	5.0000	0.0	30.0000	700.0000	1.0000
7 AKI529	5.0000	1.5000	2.0000	0.0	20.0000	500.0000	3.0000
6AKI530	15.0000	2.0000	2.0000	0.0	30.0000	700.0000	2.0000
7 AKI525	15.0000	2.0000	1.5000	0.0	15.0000	500.0000	0.0
8 AKI525	15.0000	1.0000	1.5000	0.0	20.0000	300.0000	3.0000
/0/0 AKI526	5.0000	3.0000	2.0000	0.0	20.0000	300.0000	5.0000
/ AKI528	10.0000	1.5000	2.0000	0.0	30.0000	300.0000	0.0
2 AKI527	7.0000	1.5000	2.0000	0.0	20.0000	700.0000	3.0000
3 AKI523	15.0000	2.0000	2.0000	0.0	15.0000	700.0000	1.5000
4AKI524	15.0000	3.0000	1.5000	0.0	20.0000	700.0000	5.0000
SAK1522	10.0000	2.0000	2.0000	0.0	15.0000	200.0000	1.5000
6AKI500	15.0000	3.0000	2.0000	0.0	20.0000	500.0000	1.5000
7 AKI499	15.0000	2.0000	1.5000	0.0	20.0000	500.0000	2.0000
6AKI496	15.0000	3.0000	3.0000	0.0	30.0000	500.0000	1.5000
7 AKI495	15.0000	2.0000	1.5000	0.0	20.0000	500.0000	1.5000
/0/0 AKI497	10.0000	1.0000	1.0000	0.0	20.0000	300.0000	3.0000
8 AKI498	10.0000	1.0000	1.0000	0.0	20.0000	300.0000	2.0000
7 AKI499	5.0000	1.5000	2.0000	0.0	10.0000	300.0000	2.0000
8 AKI496	15.0000	1.0000	1.0000	0.0	10.0000	300.0000	2.0000
7 AKI495	15.0000	1.0000	1.0000	0.0	10.0000	300.0000	3.0000
8 AKI497	10.0000	1.0000	1.0000	0.0	10.0000	700.0000	1.5000
7 AKI498	10.0000	1.0000	1.0000	0.0	10.0000	700.0000	1.5000
2 AKI519	5.0000	1.5000	2.0000	0.0	10.0000	300.0000	2.0000
3 AKI600	3.0000	1.0000	1.0000	0.0	10.0000	300.0000	2.0000
4AKI487	15.0000	2.0000	2.0000	0.0	20.0000	700.0000	3.0000
6AKI488	3.0000	1.5000	2.0000	0.0	10.0000	700.0000	1.5000
6AKI491	5.0000	1.0000	1.0000	0.0	10.0000	700.0000	3.0000
7 AKI492	3.0000	1.0000	1.0000	0.0	10.0000	300.0000	2.0000
8 AKI489	7.0000	1.5000	1.5000	0.0	10.0000	300.0000	1.5000
7 AKI494	7.0000	2.0000	1.5000	0.0	15.0000	700.0000	3.0000
/0/0 AKI493	5.0000	2.0000	1.5000	0.0	10.0000	700.0000	2.0000
8 AKI490	15.0000	3.0000	2.0000	0.0	50.0000	700.0000	2.0000
2 AKI492	7.0000	2.0000	1.5000	0.0	0.0	700.0000	1.5000
3 AKI491	15.0000	3.0000	1.5000	0.0	0.0	500.0000	1.0000
4AKA819	5.0000	1.5000	1.5000	0.0	0.0	700.0000	1.5000
5AKA820	5.0000	1.5000	1.5000	0.0	0.0	300.0000	1.5000
6AKA934	3.0000	0.7000	0.7000	0.0	0.0	300.0000	1.0000
7AKA935	5.0000	1.5000	1.0000	0.0	0.0	300.0000	1.0000
8AKA823	3.0000	1.0000	0.3000	0.0	0.0	300.0000	2.0000
7AKA825	10.0000	1.5000	2.0000	0.0	0.0	300.0000	3.0000
1050-AKA826	7.0000	2.0000	1.5000	0.0	0.0	10.0000	1.5000

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TABLE 1

SAMPLE	BI PPM	CO PPM	CR PPM	CU PPM	LA PPM	MO PPM	NB PPM	PB PPM	NI PPM	SB PPM	PPM
100 AKI1394	0.0	N	15.0000	5.0000	50.0000	0.0	L	0.0	L	0.0	0.0
2 AKI1395	0.0	N	5.0000	20.0000	30.0000	0.0	N	0.0	L	10.0000	0.0
3 AKI1396	0.0	N	5.0000	20.0000	30.0000	0.0	N	0.0	L	10.0000	100.0000
4 AKI1383	0.0	N	15.0000	50.0000	20.0000	0.0	N	0.0	L	10.0000	50.0000
5 AKI1382	0.0	N	20.0000	50.0000	70.0000	0.0	N	0.0	L	15.0000	30.0000
6 AKI1384	0.0	N	20.0000	20.0000	30.0000	0.0	N	0.0	L	10.0000	30.0000
7 AKI1381	0.0	N	20.0000	100.0000	100.0000	0.0	N	0.0	L	10.0000	30.0000
8 AKI1380	0.0	N	20.0000	50.0000	70.0000	0.0	N	0.0	L	10.0000	100.0000
7 AKI1379	0.0	N	15.0000	50.0000	30.0000	0.0	N	0.0	L	10.0000	30.0000
10/10 AKI1386	0.0	N	30.0000	70.0000	100.0000	0.0	N	0.0	L	20.0000	50.0000
1 AKI1385	0.0	N	30.0000	30.0000	150.0000	0.0	N	5.0000	N	30.0000	30.0000
2 AKI1534	0.0	N	30.0000	10.0000	70.0000	0.0	N	0.0	L	10.0000	15.0000
3 AKI1533	0.0	N	30.0000	10.0000	70.0000	0.0	N	0.0	L	10.0000	15.0000
YAK1535	0.0	N	70.0000	50.0000	200.0000	0.0	N	0.0	L	10.0000	10.0000
SAKI1532	0.0	N	50.0000	70.0000	70.0000	0.0	N	0.0	L	150.0000	20.0000
LAK1531	0.0	N	30.0000	30.0000	70.0000	0.0	N	0.0	L	10.0000	70.0000
7 AKI1529	0.0	N	15.0000	30.0000	15.0000	0.0	N	5.0000	N	10.0000	30.0000
8 AKI1530	0.0	N	30.0000	50.0000	50.0000	0.0	N	0.0	L	10.0000	15.0000
9 AKI1525	0.0	N	10.0000	30.0000	100.0000	0.0	N	7.0000	N	10.0000	30.0000
10/20 AKI1526	0.0	N	15.0000	10.0000	15.0000	0.0	N	0.0	L	10.0000	30.0000
1 AKI1528	0.0	N	20.0000	20.0000	30.0000	0.0	N	0.0	L	10.0000	30.0000
2 AKI1527	0.0	N	20.0000	20.0000	15.0000	0.0	N	0.0	L	10.0000	15.0000
3 AKI1523	0.0	N	30.0000	50.0000	30.0000	0.0	N	0.0	L	10.0000	30.0000
YAK1524	0.0	N	30.0000	50.0000	50.0000	0.0	N	0.0	L	10.0000	70.0000
SAKI1522	0.0	N	30.0000	30.0000	20.0000	0.0	N	0.0	L	10.0000	30.0000
LAK150	0.0	N	30.0000	50.0000	30.0000	0.0	N	0.0	L	10.0000	30.0000
7 AKI169	10.0000	N	30.0000	150.0000	20.0000	0.0	N	0.0	L	10.0000	20.0000
8 AKI1690	10.0000	N	150.0000	150.0000	300.0000	0.0	N	0.0	L	10.0000	150.0000
9 AKI1495	0.0	L	100.0000	100.0000	300.0000	0.0	N	5.0000	N	150.0000	150.0000
1/30 AKI1497	0.0	N	15.0000	15.0000	30.0000	0.0	N	0.0	L	15.0000	30.0000
AKI1498	0.0	N	15.0000	10.0000	100.0000	0.0	N	0.0	L	10.0000	150.0000
AKI1499	0.0	N	15.0000	15.0000	100.0000	0.0	N	0.0	L	10.0000	150.0000
AKI159	0.0	N	20.0000	20.0000	15.0000	0.0	N	0.0	L	10.0000	15.0000
3 AKI1600	0.0	N	10.0000	10.0000	20.0000	0.0	N	0.0	L	10.0000	15.0000
4 AKI1487	0.0	N	30.0000	70.0000	100.0000	0.0	N	50.0000	N	10.0000	7.0000
SAKI1488	0.0	N	15.0000	10.0000	20.0000	0.0	N	0.0	L	15.0000	30.0000
SAKI1491	0.0	N	15.0000	15.0000	20.0000	0.0	N	0.0	L	10.0000	10.0000
7 AKI1492	0.0	N	10.0000	15.0000	10.0000	0.0	N	0.0	L	10.0000	10.0000
8 AKI1489	0.0	N	20.0000	30.0000	50.0000	0.0	N	30.0000	N	10.0000	7.0000
9 AKI1494	0.0	N	20.0000	50.0000	70.0000	0.0	N	20.0000	N	10.0000	150.0000
10/10 AKI1493	0.0	N	20.0000	30.0000	100.0000	0.0	N	20.0000	N	10.0000	50.0000
AKI1490	0.0	N	30.0000	70.0000	70.0000	0.0	N	0.0	L	10.0000	70.0000
2 AKAB22	0.0	N	20.0000	20.0000	70.0000	0.0	N	0.0	L	0.0	5.0000
3 AKAB21	0.0	N	50.0000	50.0000	50.0000	0.0	N	0.0	L	10.0000	300.0000
4 AKAB19	0.0	N	10.0000	20.0000	20.0000	0.0	N	0.0	L	10.0000	20.0000
5 AKAB20	0.0	N	10.0000	30.0000	30.0000	0.0	N	0.0	L	10.0000	10.0000
6 AKAB34	0.0	N	15.0000	10.0000	15.0000	0.0	N	0.0	L	10.0000	15.0000
7 AKAB35	0.0	N	15.0000	50.0000	30.0000	0.0	N	10.0000	N	15.0000	70.0000
8 AKAB23	0.0	N	0.0	N	10.0000	0.0	N	0.0	L	10.0000	15.0000
9 AKAB25	0.0	N	15.0000	30.0000	20.0000	0.0	N	15.0000	N	15.0000	30.0000
10/50 AKAB26	0.0	N	10.0000	30.0000	150.0000	0.0	N	10.0000	N	15.0000	70.0000

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TABLE I

SAMPLE	SC PPM	SR PPM	V PPM	Y PPM	ZN PPM	ZR PPM	AU PPM
100 / AKI394	7.0000	150.0000	30.0000	0.0	0.0	300.0000	0.0200L
2 AKI395	10.0000	30.0000	70.0000	0.0	15.0000	200.0000	0.0200L
3 AKI396	10.0000	0.0	L	0.0	10.0000	0.0	0.0200L
4 AKI393	15.0000	0.0	N	0.0	15.0000	0.0	0.0200L
5 AKI382	15.0000	0.0	N	0.0	15.0000	0.0	0.0200L
6 AKI384	15.0000	0.0	N	0.0	15.0000	0.0	0.0200L
7 AKI381	15.0000	0.0	N	0.0	15.0000	0.0	0.0200L
8 AKI380	15.0000	0.0	N	0.0	15.0000	0.0	0.0200L
9 AKI379	15.0000	0.0	N	0.0	15.0000	0.0	0.0200L
10 / 0 AKI386	15.0000	0.0	N	0.0	15.0000	0.0	0.0400
1 AKI385	15.0000	0.0	N	0.0	15.0000	0.0	0.1000
2 AKI34	15.0000	0.0	N	0.0	15.0000	0.0	0.0400
3 AKI33	15.0000	0.0	N	0.0	15.0000	0.0	0.0200L
4 AKI35	20.0000	0.0	N	0.0	30.0000	0.0	0.0400
5 AKI32	20.0000	0.0	N	0.0	30.0000	0.0	0.0200L
6 AKI31	20.0000	0.0	N	0.0	20.0000	0.0	0.0200L
7 AKI29	10.0000	0.0	N	0.0	20.0000	0.0	0.0200L
8 AKI30	15.0000	0.0	N	0.0	30.0000	0.0	0.0200L
9 AKI25	10.0000	0.0	L	0.0	20.0000	0.0	0.0200L
10 / 0 AKI26	15.0000	0.0	N	0.0	20.0000	0.0	0.0200L
1 AKI28	15.0000	30.0000	300.0000	0.0	20.0000	0.0	0.0200L
2 AKI27	10.0000	0.0	N	0.0	20.0000	0.0	0.0200L
3 AKI23	15.0000	0.0	N	0.0	20.0000	0.0	0.0200L
4 AKI24	20.0000	15.0000	300.0000	0.0	20.0000	0.0	0.0200L
5 AKI22	15.0000	0.0	N	0.0	20.0000	0.0	0.0200L
6 AKI500	15.0000	0.0	N	0.0	30.0000	0.0	0.0200L
7 AKI499	15.0000	10.0000	200.0000	0.0	30.0000	0.0	0.0200L
8 AKI496	20.0000	15.0000	500.0000	0.0	30.0000	0.0	0.0200L
9 AKI495	15.0000	15.0000	300.0000	0.0	30.0000	0.0	0.0200L
10 / 0 AKI497	10.0000	10.0000	200.0000	0.0	70.0000	0.0	0.0200L
1 AKI498	10.0000	0.0	L	0.0	20.0000	0.0	0.0200L
2 AKI599	15.0000	0.0	L	0.0	30.0000	0.0	0.0200L
3 AKI600	7.0000	0.0	L	0.0	200.0000	0.0	0.0200L
4 AKI487	15.0000	15.0000	300.0000	0.0	30.0000	0.0	0.0200L
5 AKI488	7.0000	0.0	N	0.0	20.0000	0.0	0.0200L
6 AKI491	7.0000	200.0000	300.0000	50.0000	30.0000	200.0000	0.0200L
7 AKI492	5.0000	0.0	L	0.0	150.0000	0.0	0.0200L
8 AKI489	10.0000	0.0	N	0.0	150.0000	0.0	0.0200L
9 AKI494	15.0000	0.0	L	0.0	200.0000	0.0	0.0200L
10 / 0 AKI493	15.0000	15.0000	300.0000	0.0	30.0000	0.0	0.0200L
1 AKI490	15.0000	10.0000	500.0000	0.0	150.0000	0.0	0.0200L
2 AKI482	15.0000	10.0000	300.0000	0.0	150.0000	0.0	0.0200L
3 AKI481	20.0000	0.0	L	0.0	300.0000	0.0	0.0200L
4 AKI489	10.0000	0.0	L	0.0	150.0000	0.0	0.0200L
5 AKI480	15.0000	0.0	N	0.0	300.0000	0.0	0.0200L
6 AKI493	7.0000	0.0	L	0.0	200.0000	0.0	0.0200L
7 AKI495	10.0000	0.0	L	0.0	150.0000	0.0	0.0200L
8 AKI482	7.0000	0.0	N	0.0	100.0000	0.0	0.0200L
9 AKI485	15.0000	0.0	N	0.0	200.0000	0.0	0.0200L
10 / 0 AKI486	15.0000	0.0	N	0.0	70.0000	0.0	0.0200L
1 AKI4826	15.0000	0.0	L	0.0	300.0000	0.0	0.0200L

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TABLE I

SAMPLE	FE PCT	CA PCT	MN PPM	AS PPM	B PPM	BA PPM	BE PPM
105/ AKA818	15.0000	1.0000	2000.0000	0.0	30.0000	700.0000	1.5000
2 AKA817	3.0000	0.7000	0.2000	1000.0000	0.0	150.0000	1.5000
3 AKA824	5.0000	0.7000	0.3000	1500.0000	0.0	300.0000	3.0000
4 AKA827	5.0000	1.5000	0.5000	1500.0000	0.0	300.0000	3.0000
5 AKA828	15.0000	3.0000	2.0000	0.7000	10.0000	700.0000	3.0000
6 AKA833	10.0000	2.0000	2.0000	0.7000	10.0000	700.0000	1.0000
7 AKA832	5.0000	1.0000	1.0000	0.3000	0.0	150.0000	1.0000
8 AKA831	7.0000	1.0000	1.5000	0.5000	0.0	300.0000	7.0000
9 AKA834	15.0000	2.0000	2.0000	0.7000	10.0000	300.0000	2.0000
10 AKA829	10.0000	1.5000	1.5000	0.5000	0.0	300.0000	1.0000
11 AKA830	10.0000	1.5000	1.5000	0.5000	0.0	300.0000	1.5000
2 AKA853	7.0000	1.5000	2.0000	0.3000	0.0	10.0000	2.0000
3 AKA936	5.0000	0.7000	0.7000	0.5000	0.0	10.0000	2.0000
4 AKA855	7.0000	0.7000	1.5000	0.3000	0.0	10.0000	3.0000
5 AKA854	7.0000	1.0000	1.5000	0.5000	0.0	10.0000	3.0000
6 AKA835	15.0000	3.0000	5.0000	0.7000	2000.0000	0.0	1.5000
7 AKA836	10.0000	1.5000	5.0000	0.7000	2000.0000	0.0	1.5000
8 AKA787	15.0000	2.0000	1.5000	0.7000	1500.0000	0.0	1.5000
9 AKA788	5.0000	1.0000	0.7000	0.3000	1000.0000	0.0	1.5000
10 AKA789	15.0000	3.0000	1.5000	1.0000	0.0	1500.0000	1.5000
11 AKA784	10.0000	1.0000	1.0000	0.5000	1000.0000	0.0	1.5000
2 AKA785	3.0000	0.7000	1.0000	0.3000	500.0000	1.5000	2.0000
3 AKA786	15.0000	1.0000	1.5000	0.7000	1500.0000	0.0	1.5000
4 AKA857	5.0000	1.0000	0.7000	0.3000	1000.0000	0.0	2.0000
5 AKA856	5.0000	1.0000	1.5000	0.3000	1000.0000	0.0	1.5000
6 AKA837	15.0000	3.0000	3.0000	1.0000	2000.0000	0.0	3.0000
7 AKA838	15.0000	2.0000	1.5000	0.5000	1500.0000	0.0	2.0000
8 AKA858	7.0000	1.0000	1.0000	0.3000	1000.0000	0.0	1.5000
9 AKA859	5.0000	0.7000	0.7000	0.3000	1000.0000	0.0	2.0000
10 AKA852	5.0000	0.3000	0.5000	0.1500	1000.0000	0.0	2.0000
11 AKA860	10.0000	0.7000	1.0000	0.3000	1000.0000	0.0	3.0000
2 AKA851	5.0000	1.0000	1.0000	0.5000	700.0000	0.0	1.0000
3 AKA840	15.0000	3.0000	1.5000	1.0000	1000.0000	0.0	3.0000
4 AKA841	3.0000	0.7000	0.7000	0.2000	1000.0000	0.0	1.5000
5 AKA839	15.0000	3.0000	3.0000	0.7000	1500.0000	0.0	1.5000
6 AKA850	3.0000	1.0000	1.5000	0.5000	1500.0000	1.5000	3.0000
7 AKA849	5.0000	1.0000	1.5000	0.5000	1000.0000	1.0000	1.5000
8 AKA848	5.0000	1.0000	1.0000	0.5000	1500.0000	0.0	3.0000
9 AKA847	15.0000	2.0000	1.5000	0.7000	2000.0000	0.0	1.5000
10 AKA846	7.0000	1.0000	1.5000	0.5000	1500.0000	0.0	1.5000
11 AKA845	15.0000	1.5000	1.5000	0.7000	2000.0000	0.0	2.0000
2 AKA844	10.0000	1.5000	1.5000	0.5000	1500.0000	0.0	1.0000
3 AKA843	5.0000	1.0000	1.5000	0.5000	1500.0000	150.0000	3.0000
4 AKA842	5.0000	1.0000	1.0000	0.5000	1000.0000	50.0000	1.5000
5 AKA861	7.0000	1.0000	1.5000	0.3000	1500.0000	0.0	3.0000
6 AKA869	5.0000	1.0000	1.5000	0.5000	1000.0000	1.0000	1.5000
7 AKA868	5.0000	0.7000	1.5000	0.3000	1500.0000	0.7000	2.0000
8 AKA867	7.0000	1.5000	1.5000	0.7000	1000.0000	1.0000	1.5000
9 AKA862	5.0000	1.0000	0.7000	0.3000	700.0000	50.0000	2.0000
10 AKA863	5.0000	1.0000	0.7000	0.3000	1000.0000	0.0	1.5000

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TABLE 1

SAMPLE	B1 PPM	CO PPM	CR PPM	CU PPM	LA PPM	MD PPM	NI PPM	PB PPM	SB PPM
1051 AKA818	0.0	N	70.0000	50.0000	150.0000	0.0	L	70.0000	0.0
2 AKA817	0.0	N	0.0	L	0.0	0.0	L	10.0000	10.0000
3 AKA824	0.0	N	0.0	L	30.0000	30.0000	0.0	10.0000	70.0000
4 AKA827	0.0	N	7.0000	20.0000	20.0000	15.0000	0.0	10.0000	70.0000
5 AKA828	0.0	N	20.0000	20.0000	30.0000	15.0000	0.0	50.0000	50.0000
6 AKA833	0.0	N	15.0000	70.0000	30.0000	10.0000	0.0	30.0000	30.0000
7 AKA832	0.0	N	5.0000	30.0000	15.0000	10.0000	0.0	15.0000	30.0000
8 AKA831	0.0	N	10.0000	10.0000	15.0000	10.0000	0.0	50.0000	0.0
9 AKA834	0.0	N	15.0000	70.0000	30.0000	15.0000	0.0	30.0000	70.0000
106 AKA829	0.0	N	10.0000	15.0000	20.0000	10.0000	0.0	50.0000	0.0
1 AKA830	0.0	N	10.0000	30.0000	30.0000	10.0000	0.0	10.0000	10.0000
2 AKA835	0.0	N	7.0000	30.0000	15.0000	20.0000	0.0	15.0000	50.0000
3 AKA936	0.0	N	15.0000	30.0000	30.0000	0.0	L	10.0000	10.0000
4 AKA855	0.0	N	7.0000	50.0000	20.0000	20.0000	0.0	15.0000	70.0000
5 AKA854	0.0	N	0.0	L	10.0000	10.0000	0.0	10.0000	70.0000
6 AKA835	0.0	N	20.0000	15.0000	30.0000	70.0000	0.0	10.0000	150.0000
7 AKA836	0.0	N	10.0000	10.0000	20.0000	20.0000	0.0	10.0000	15.0000
8 AKA787	0.0	N	15.0000	70.0000	50.0000	0.0	L	10.0000	15.0000
9 AKA788	0.0	N	20.0000	20.0000	20.0000	30.0000	0.0	10.0000	100.0000
1070 AKA789	0.0	N	30.0000	70.0000	50.0000	0.0	L	10.0000	30.0000
1 AKA784	0.0	N	10.0000	10.0000	20.0000	20.0000	0.0	10.0000	70.0000
2 AKA785	0.0	N	0.0	L	0.0	0.0	L	0.0	0.0
3 AKA786	0.0	N	10.0000	15.0000	15.0000	30.0000	0.0	10.0000	15.0000
4 AKA857	0.0	N	0.0	L	10.0000	7.0000	150.0000	5.0000	50.0000
5 AKA856	0.0	N	5.0000	10.0000	7.0000	30.0000	0.0	5.0000	30.0000
6 AKA837	0.0	N	20.0000	50.0000	50.0000	70.0000	0.0	20.0000	20.0000
7 AKA838	0.0	N	10.0000	100.0000	70.0000	20.0000	0.0	10.0000	70.0000
8 AKA858	0.0	N	0.0	L	10.0000	15.0000	20.0000	0.0	30.0000
9 AKA859	0.0	N	0.0	L	15.0000	0.0	L	15.0000	50.0000
1080 AKA852	0.0	N	0.0	L	10.0000	0.0	L	10.0000	0.0
1 AKA860	0.0	N	0.0	L	15.0000	50.0000	30.0000	7.00000	5.0000
2 AKA851	0.0	N	5.0000	70.0000	15.0000	0.0	N	10.0000	10.0000
3 AKA840	0.0	N	20.0000	300.0000	15.0000	20.0000	0.0	10.0000	70.0000
4 AKA841	0.0	N	5.0000	20.0000	10.0000	0.0	L	10.0000	5.0000
5 AKA839	0.0	N	20.0000	50.0000	50.0000	0.0	L	10.0000	20.0000
6 AKA850	0.0	N	5.0000	10.0000	50.0000	0.0	L	15.0000	5.0000
7 AKA849	0.0	N	0.0	L	10.0000	20.0000	0.0	15.0000	5.0000
8 AKA848	0.0	N	5.0000	10.0000	10.0000	0.0	L	15.0000	10.0000
9 AKA847	0.0	N	20.0000	30.0000	20.0000	70.0000	5.0000	15.0000	30.0000
1090 AKA846	0.0	N	5.0000	20.0000	15.0000	20.0000	0.0	7.0000	70.0000
1 AKA845	0.0	N	10.0000	30.0000	30.0000	50.0000	0.0	15.0000	100.0000
2 AKA844	0.0	N	15.0000	15.0000	30.0000	20.0000	0.0	10.0000	7.0000
3 AKA843	0.0	N	5.0000	15.0000	30.0000	300.0000	5.0000	5.0000	70.0000
4 AKA842	0.0	N	5.0000	20.0000	50.0000	20.0000	0.0	15.0000	300.0000
5 AKA861	0.0	N	5.0000	30.0000	30.0000	0.0	L	20.0000	7.0000
6 AKA869	0.0	N	7.0000	20.0000	30.0000	0.0	N	10.0000	150.0000
7 AKA868	0.0	N	7.0000	10.0000	70.0000	0.0	L	10.0000	15.0000
8 AKA867	0.0	N	7.0000	30.0000	150.0000	0.0	L	7.0000	150.0000
9 AKA862	0.0	N	7.0000	30.0000	150.0000	0.0	L	10.0000	10.0000
1000 AKA863	0.0	N	10.0000	0.0	10.0000	0.0	L	10.0000	100.0000

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TABLE 1

SAMPLE	SC PPM	SR PPM	V PPM	ZN PPM	ZR PPM	AU PPM
105 / AKAB18	30.0000	500.0000	300.0000	50.0000	200.0000	500.0000
2 AKAB17	0.0 L	10.0000	100.0000	30.0000	0.0 L	150.0000
9 AKAB24	7.0000	20.0000	150.0000	50.0000	0.0	100.0000
4 AKAB27	15.0000	0.0 L	300.0000	200.0000	0.0 L	300.0000
5 AKAB28	15.0000	0.0 L	300.0000	300.0000	0.0 L	300.0000
6 AKAB33	20.0000	15.0000	500.0000	150.0000	0.0 L	150.0000
7 AKAB32	10.0000	10.0000	200.0000	70.0000	0.0 L	300.0000
8 AKAB31	10.0000	0.0 L	300.0000	100.0000	0.0 L	300.0000
9 AKAB34	20.0000	0.0 L	300.0000	300.0000	0.0 L	500.0000
106 AKAB29	15.0000	10.0000	200.0000	150.0000	0.0 L	300.0000
, AKAB30	15.0000	15.0000	200.0000	100.0000	0.0 L	200.0000
2 AKAB53	15.0000	0.0 L	300.0000	150.0000	0.0 L	200.0000
3 AKAB36	15.0000	0.0 L	150.0000	150.0000	0.0 L	150.0000
4 AKAB55	7.0000	10.0000	300.0000	70.0000	0.0 L	200.0000
5 AKAB54	7.0000	0.0 L	200.0000	150.0000	0.0 L	1000.0000
6 AKAB35	20.0000	0.0 L	500.0000	300.0000	0.0 L	1000.0000
7 AKAB36	10.0000	0.0 L	200.0000	150.0000	0.0 L	200.0000
8 AKAB77	20.0000	0.0 L	300.0000	300.0000	0.0 L	100.0000
9 AKAB78	7.0000	0.0 L	150.0000	100.0000	0.0 L	300.0000
1070 AKAB79	20.0000	0.0 L	300.0000	300.0000	0.0 L	500.0000
1071 AKAB74	10.0000	0.0 L	200.0000	150.0000	0.0 L	300.0000
2 AKAB75	5.0000	10.0000	100.0000	50.0000	0.0 L	200.0000
3 AKAB76	15.0000	10.0000	200.0000	150.0000	0.0 L	500.0000
4 AKAB77	7.0000	10.0000	150.0000	100.0000	0.0 L	300.0000
5 AKAB76	10.0000	10.0000	200.0000	100.0000	0.0 L	300.0000
6 AKAB37	20.0000	10.0000	500.0000	300.0000	0.0 L	700.0000
7 AKAB38	15.0000	10.0000	300.0000	100.0000	0.0 L	200.0000
8 AKAB58	15.0000	0.0 L	150.0000	150.0000	0.0 L	300.0000
9 AKAB59	15.0000	15.0000	150.0000	30.0000	0.0 L	300.0000
1080 AKAB52	5.0000	15.0000	0.0 L	30.0000	0.0 L	300.0000
1081 AKAB60	7.0000	30.0000	150.0000	30.0000	0.0 L	500.0000
2 AKAB51	10.0000	10.0000	150.0000	70.0000	0.0 L	300.0000
3 AKAB40	20.0000	0.0 L	150.0000	300.0000	0.0 L	200.0000
4 AKAB41	5.0000	0.0 L	100.0000	70.0000	0.0 L	100.0000
5 AKAB39	20.0000	10.0000	500.0000	200.0000	0.0 L	300.0000
6 AKAB50	10.0000	0.0 L	200.0000	100.0000	0.0 L	300.0000
7 AKAB49	10.0000	10.0000	150.0000	100.0000	0.0 L	300.0000
8 AKAB48	10.0000	0.0 L	200.0000	100.0000	0.0 L	300.0000
9 AKAB47	15.0000	0.0 N	500.0000	200.0000	0.0 L	300.0000
1090 AKAB46	10.0000	0.0 L	200.0000	70.0000	0.0 L	300.0000
1091 AKAB45	15.0000	10.0000	300.0000	100.0000	0.0 L	300.0000
2 AKAB44	15.0000	0.0 L	300.0000	150.0000	0.0 L	200.0000
3 AKAB43	10.0000	0.0 L	200.0000	70.0000	0.0 L	300.0000
4 AKAB42	7.0000	15.0000	150.0000	100.0000	0.0 L	1000.0000
5 AKAB61	10.0000	15.0000	150.0000	150.0000	0.0 L	500.0000
6 AKAB69	10.0000	0.0 L	150.0000	150.0000	0.0 L	70.0000
7 AKAB68	5.0000	0.0 L	150.0000	100.0000	0.0 L	300.0000
8 AKAB67	10.0000	20.0000	300.0000	150.0000	0.0 L	150.0000
7 AKAB62	7.0000	30.0000	150.0000	150.0000	0.0 L	30.0000
110 AKAB63	5.0000	15.0000	150.0000	150.0000	0.0 L	70.0000

TABLE I

CA	PCT	MG	PCT
FE	PCT	MG	PCT
1/1 AKA864	15.0000	2.0000	1.5000
2 AKA892	5.0000	0.7000	0.5000
3 AKA891	7.0000	0.7000	0.7000
4 AKA890	15.0000	1.5000	1.5000
5 AKA887	10.0000	1.5000	1.5000
6 AKA888	15.0000	2.0000	2.0000
7 AKA889	10.0000	1.5000	1.5000
8 AKA872	3.0000	1.0000	1.0000
9 AKA874	5.0000	1.5000	1.0000
11 AKA870	15.0000	3.0000	2.0000
1 AKA873	10.0000	1.0000	1.0000
2 AKA871	10.0000	2.0000	2.0000
3 AKA876	15.0000	2.0000	3.0000
9 AKA877	10.0000	1.5000	2.0000
5 AKA875	15.0000	3.0000	5.0000
6 AKA878	10.0000	1.5000	1.5000
7 AKA879	10.0000	1.5000	1.5000
8 AKA880	10.0000	1.5000	1.5000
7 AKA883	15.0000	3.0000	2.0000
11/20 AKA884	10.0000	2.0000	1.5000
1 AKA882	10.0000	1.5000	1.5000
2 AKA881	10.0000	1.5000	1.5000
3 AKA886	5.0000	1.0000	1.0000
YAKA885	7.0000	1.0000	1.5000
5 AKA468	15.0000	1.5000	1.5000
6 AKA467	3.0000	0.5000	1.0000
7 AKA265	5.0000	1.5000	1.5000
6 AKA264	5.0000	1.5000	1.0000
9 AKA266	3.0000	1.0000	0.7000
1/30 AKA267	10.0000	1.5000	1.5000
1 AKA268	3.0000	1.0000	1.0000
2 AKA260	3.0000	0.3000	0.5000
3 AKA261	3.0000	0.3000	0.5000
9 AKA262	1.5000	0.3000	0.5000
5 AKA263	2.0000	0.3000	0.7000
6 AKA269	3.0000	0.5000	0.7000
7 AKA256	5.0000	0.5000	0.7000
8 AKA122	2.0000	0.3000	0.7000
9 AKA204	2.0000	0.3000	0.7000
11/6 AKA258	3.0000	0.3000	0.5000
1 AKA259	3.0000	0.7000	0.7000
2 AKA257	3.0000	0.5000	1.0000
3 AKA123	3.0000	0.3000	0.7000
4 AKA205	3.0000	0.3000	0.7000
5 AKA272	1.5000	0.2000	0.5000
6 AKA273	2.0000	0.3000	0.7000
7 AKA274	2.0000	0.2000	0.7000
8 AKA485	2.0000	0.3000	0.7000
9 AKA487	3.0000	0.3000	0.7000
1/50 AKA494	7.0000	0.2000	0.1500

TABLE 1

SAMPLE	BI PPM	CO PPM	CR PPM	LA PPM	NB PPM	NI PPM	PB PPM	SB PPM	PPM
1/61 AKA864	0.0	15.0000	70.0000	150.0000	5.0000	10.0000	100.0000	0.0	0.0
2 AKA892	0.0	10.0000	30.0000	30.0000	0.0	15.0000	30.0000	0.0	0.0
3 AKA891	0.0	10.0000	30.0000	30.0000	20.0000	10.0000	20.0000	0.0	0.0
4 AKA890	0.0	15.0000	100.0000	100.0000	0.0	15.0000	10.0000	0.0	0.0
5 AKA887	0.0	30.0000	70.0000	70.0000	20.0000	15.0000	30.0000	30.0000	0.0
6 AKA888	0.0	30.0000	20.0000	50.0000	0.0	15.0000	30.0000	30.0000	0.0
7 AKA889	0.0	10.0000	20.0000	50.0000	30.0000	10.0000	10.0000	0.0	0.0
8 AKA872	0.0	0.0	15.0000	10.0000	0.0	0.0	0.0	150.0000	0.0
9 AKA874	0.0	5.0000	15.0000	10.0000	0.0	0.0	10.0000	0.0	0.0
10 AKA870	0.0	15.0000	70.0000	30.0000	0.0	0.0	15.0000	15.0000	0.0
11 AKA873	0.0	7.0000	15.0000	10.0000	0.0	0.0	15.0000	15.0000	0.0
12 AKA871	0.0	10.0000	30.0000	50.0000	30.0000	20.0000	20.0000	15.0000	0.0
13 AKA876	0.0	0.0	20.0000	70.0000	20.0000	5.0000	15.0000	20.0000	0.0
14 AKA877	0.0	7.0000	30.0000	30.0000	20.0000	0.0	0.0	70.0000	0.0
15 AKA875	0.0	15.0000	20.0000	100.0000	50.0000	0.0	15.0000	15.0000	0.0
16 AKA878	0.0	10.0000	30.0000	30.0000	20.0000	5.0000	10.0000	15.0000	0.0
17 AKA879	0.0	10.0000	20.0000	30.0000	20.0000	5.0000	10.0000	15.0000	0.0
18 AKA880	0.0	10.0000	20.0000	30.0000	0.0	0.0	10.0000	10.0000	0.0
19 AKA883	0.0	30.0000	50.0000	70.0000	0.0	0.0	10.0000	100.0000	0.0
20 AKA884	0.0	20.0000	30.0000	50.0000	0.0	0.0	10.0000	50.0000	0.0
21 AKA882	0.0	15.0000	70.0000	30.0000	20.0000	5.0000	15.0000	20.0000	0.0
22 AKA881	0.0	15.0000	20.0000	50.0000	20.0000	5.0000	10.0000	100.0000	0.0
23 AKA886	0.0	7.0000	20.0000	30.0000	0.0	0.0	10.0000	20.0000	0.0
24 AKA885	0.0	5.0000	15.0000	10.0000	0.0	0.0	15.0000	50.0000	0.0
25 AKA468	0.0	15.0000	20.0000	30.0000	0.0	0.0	10.0000	30.0000	0.0
26 AKA467	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.0000	0.0
27 AKA285	0.0	7.0000	30.0000	15.0000	0.0	0.0	10.0000	15.0000	0.0
28 AKA264	0.0	5.0000	15.0000	7.00000	0.0	0.0	10.0000	30.0000	0.0
29 AKA266	0.0	5.0000	100.0000	5.0000	0.0	0.0	0.0	20.0000	0.0
30 AKA267	0.0	10.0000	150.0000	10.0000	0.0	0.0	10.0000	50.0000	0.0
31 AKA268	0.0	0.0	0.0	100.0000	7.0000	0.0	0.0	10.0000	0.0
32 AKA260	0.0	0.0	0.0	0.0	150.0000	0.0	0.0	0.0	50.0000
33 AKA261	0.0	0.0	0.0	0.0	5.0000	0.0	0.0	0.0	20.0000
34 AKA262	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.0000
35 AKA263	0.0	0.0	0.0	0.0	15.0000	20.0000	0.0	0.0	50.0000
36 AKA269	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.0000
37 AKA256	0.0	0.0	0.0	0.0	7.0000	20.0000	0.0	0.0	50.0000
38 AKA252	0.0	50.0000	0.0	0.0	5.0000	0.0	0.0	0.0	100.0000
39 AKA261	0.0	0.0	0.0	0.0	15.0000	0.0	0.0	0.0	15.0000
40 AKA204	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.0000
41 AKA212	0.0	0.0	0.0	0.0	70.0000	0.0	0.0	0.0	70.0000
42 AKA205	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0000
43 AKA272	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.0000
44 AKA273	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.0000
45 AKA274	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.0000
46 AKA485	0.0	0.0	0.0	0.0	30.0000	20.0000	0.0	0.0	100.0000
47 AKA487	0.0	0.0	0.0	0.0	20.0000	0.0	0.0	0.0	30.0000
48 AKA494	0.0	0.0	0.0	0.0	20.0000	70.0000	0.0	0.0	50.0000

TABLE 1

SAMPLE	SC PPM	SR PPM	SN PPM	V PPM	W PPM	Y PPM	ZN PPM	ZR PPM	AU PPM
//dIAKA86 <sup>4</sup>	15.0000	200.0000	300.0000	300.0000	0.0	0.0	200.0000	300.0000	0.0200L
2AKA89 <sup>2</sup>	10.0000	30.0000	150.0000	100.0000	0.0	0.0	15.0000	300.0000	0.0200L
3AKA89 <sup>1</sup>	10.0000	15.0000	150.0000	150.0000	0.0	0.0	20.0000	0.0	0.0200L
4AKA89 <sup>0</sup>	15.0000	0.0	150.0000	300.0000	0.0	0.0	30.0000	0.0	0.0200L
5AKA88 <sup>7</sup>	15.0000	15.0000	300.0000	150.0000	0.0	0.0	20.0000	0.0	0.0200L
6AKA88 <sup>8</sup>	15.0000	0.0	300.0000	200.0000	0.0	0.0	20.0000	0.0	0.0200L
7AKA88 <sup>9</sup>	15.0000	0.0	300.0000	150.0000	0.0	0.0	20.0000	0.0	0.0200L
8AKA87 <sup>2</sup>	7.0000	0.0	150.0000	70.0000	0.0	0.0	200.0000	70.0000	0.0200L
9AKA87 <sup>4</sup>	7.0000	0.0	150.0000	70.0000	0.0	0.0	20.0000	70.0000	0.0200L
10AKA87 <sup>0</sup>	15.0000	0.0	200.0000	300.0000	0.0	0.0	30.0000	300.0000	0.0200L
11AKA87 <sup>1</sup>	10.0000	0.0	150.0000	150.0000	0.0	0.0	20.0000	200.0000	0.0200L
12AKA87 <sup>3</sup>	10.0000	0.0	150.0000	150.0000	0.0	0.0	20.0000	200.0000	0.0200L
13AKA87 <sup>1</sup>	15.0000	0.0	300.0000	150.0000	0.0	0.0	50.0000	200.0000	0.0200L
14AKA87 <sup>6</sup>	15.0000	0.0	300.0000	200.0000	0.0	0.0	15.0000	300.0000	0.0200L
15AKA87 <sup>7</sup>	10.0000	10.0000	300.0000	150.0000	0.0	0.0	30.0000	200.0000	0.0200L
16AKA87 <sup>5</sup>	15.0000	10.0000	300.0000	300.0000	0.0	0.0	70.0000	200.0000	0.0200L
17AKA87 <sup>8</sup>	10.0000	15.0000	300.0000	150.0000	0.0	0.0	30.0000	300.0000	0.0200L
18AKA87 <sup>9</sup>	10.0000	0.0	300.0000	150.0000	0.0	0.0	30.0000	300.0000	0.0200L
19AKA88 <sup>0</sup>	10.0000	0.0	300.0000	150.0000	0.0	0.0	70.0000	150.0000	0.0200L
20AKA88 <sup>3</sup>	20.0000	0.0	300.0000	500.0000	0.0	0.0	30.0000	70.0000	0.0200L
21AKA88 <sup>4</sup>	15.0000	0.0	300.0000	300.0000	0.0	0.0	30.0000	300.0000	0.0200L
22AKA88 <sup>4</sup>	15.0000	0.0	300.0000	300.0000	0.0	0.0	30.0000	300.0000	0.0200L
23AKA88 <sup>2</sup>	15.0000	0.0	300.0000	150.0000	0.0	0.0	30.0000	300.0000	0.0200L
24AKA88 <sup>1</sup>	15.0000	0.0	300.0000	150.0000	0.0	0.0	30.0000	300.0000	0.0200L
25AKA88 <sup>6</sup>	10.0000	0.0	200.0000	150.0000	0.0	0.0	20.0000	150.0000	0.0200L
26AKA88 <sup>5</sup>	10.0000	0.0	300.0000	150.0000	0.0	0.0	10.0000	70.0000	0.0200L
27AKA44 <sup>6</sup>	30.0000	0.0	200.0000	150.0000	0.0	0.0	30.0000	300.0000	0.0200L
28AKA44 <sup>8</sup>	5.0000	0.0	200.0000	150.0000	0.0	0.0	30.0000	100.0000	0.0200L
29AKA44 <sup>7</sup>	15.0000	0.0	300.0000	150.0000	0.0	0.0	15.0000	70.0000	0.0200L
30AKA26 <sup>5</sup>	15.0000	0.0	200.0000	150.0000	0.0	0.0	15.0000	150.0000	0.0200L
31AKA26 <sup>4</sup>	15.0000	0.0	200.0000	150.0000	0.0	0.0	15.0000	150.0000	0.0200L
32AKA26 <sup>6</sup>	7.0000	0.0	200.0000	150.0000	0.0	0.0	10.0000	70.0000	0.0200L
33AKA26 <sup>7</sup>	15.0000	0.0	200.0000	150.0000	0.0	0.0	15.0000	300.0000	0.0200L
34AKA26 <sup>8</sup>	7.0000	0.0	150.0000	150.0000	0.0	0.0	15.0000	100.0000	0.0200L
35AKA26 <sup>0</sup>	5.0000	0.0	100.0000	100.0000	0.0	0.0	30.0000	300.0000	0.0200L
36AKA26 <sup>1</sup>	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0200L
37AKA26 <sup>2</sup>	0.0	N	0.0	100.0000	0.0	0.0	10.0000	10.0000	0.0200L
38AKA26 <sup>3</sup>	5.0000	0.0	150.0000	150.0000	0.0	0.0	20.0000	70.0000	0.0200L
39AKA26 <sup>9</sup>	5.0000	0.0	100.0000	30.0000	0.0	0.0	15.0000	15.0000	0.0200L
40AKA25 <sup>6</sup>	0.0	N	0.0	100.0000	15.0000	0.0	10.0000	10.0000	0.0200L
41AKA25 <sup>9</sup>	5.0000	0.0	0.0	0.0	0.0	0.0	30.0000	30.0000	0.0200L
42AKA25 <sup>7</sup>	5.0000	0.0	0.0	150.0000	0.0	0.0	15.0000	70.0000	0.0200L
43AKA12 <sup>3</sup>	0.0	L	0.0	0.0	0.0	0.0	16.0000	200.0000	0.0200L
44AKA20 <sup>5</sup>	0.0	L	0.0	100.0000	0.0	0.0	10.0000	150.0000	0.0200L
45AKA27 <sup>2</sup>	0.0	L	0.0	100.0000	0.0	0.0	10.0000	300.0000	0.0200L
46AKA27 <sup>3</sup>	0.0	N	0.0	150.0000	0.0	0.0	15.0000	15.0000	0.0200L
47AKA27 <sup>4</sup>	0.0	N	0.0	10.0000	0.0	0.0	15.0000	30.0000	0.0200L
48AKA48 <sup>5</sup>	0.0	N	0.0	10.0000	0.0	0.0	15.0000	70.0000	0.0200L
49AKA48 <sup>7</sup>	0.0	N	0.0	20.0000	0.0	0.0	30.0000	30.0000	0.0200L
50AKA49 <sup>4</sup>	5.0000	0.0	0.0	20.0000	0.0	0.0	30.0000	30.0000	0.0200L

TABLE 1

SAMPLE	FE PCT	MG PCT	CA PCT	TII PCT	MN PPM	AG PPM	AS PPM	B PPM	BA PPM	BE PPM
1/15 AKA496	15.0000	0.2000	0.0700	0.1500	2000.0000	30.0000	0.0	15.0000	1500.0000	1.5000
2 AKA498	15.0000	0.3000	0.0	0.1500	1500.0000	30.0000	0.0	15.0000	1500.0000	2.0000
3 AKA193	2.0000	0.2000	0.3000	0.1000	700.0000	0.0	0.0	N	700.0000	0.0
4 AKA194	3.0000	0.3000	0.5000	0.1500	700.0000	0.0	0.0	N	700.0000	1.0000
5 AKA195	1.5000	0.3000	0.5000	0.1500	700.0000	0.0	0.0	N	700.0000	0.0
6 AKA297	1.5000	0.2000	0.3000	0.1000	300.0000	0.0	0.0	N	700.0000	1.5000
7 AKA298	1.5000	0.2000	0.5000	0.1000	300.0000	0.0	0.0	N	700.0000	1.5000
8 AKA275	3.0000	0.7000	0.7000	0.3000	1000.0000	0.0	0.0	N	700.0000	1.5000
9 AKA276	5.0000	1.5000	1.5000	0.3000	1500.0000	0.0	0.0	L	700.0000	1.0000
11/6 AKA278	5.0000	1.0000	1.5000	0.5000	3000.0000	1.0000	0.0	N	700.0000	1.0000
1 AKA277	5.0000	0.7000	1.5000	0.3000	2000.0000	1.0000	0.0	N	700.0000	1.5000
2 AKA279	3.0000	1.0000	0.7000	0.2000	1500.0000	1.0000	0.0	N	300.0000	0.0
3 AKA271	3.0000	0.7000	0.7000	0.3000	1000.0000	0.0	0.0	N	700.0000	1.5000
4 AKA270	5.0000	0.7000	0.7000	0.3000	700.0000	0.0	0.0	N	700.0000	0.0
5 AKA299	3.0000	0.2000	0.5000	0.2000	300.0000	0.0	0.0	N	500.0000	1.0000
6 AKA300	3.0000	0.3000	0.7000	0.1500	500.0000	0.0	0.0	N	500.0000	1.5000
7 AKA601	1.5000	0.1500	0.5000	0.1000	300.0000	0.0	0.0	N	500.0000	2.0000
8 AKA602	3.0000	0.7000	0.7000	0.2000	1500.0000	0.0	0.0	N	700.0000	1.5000
9 AKA603	3.0000	0.7000	0.7000	0.2000	1500.0000	0.0	0.0	N	500.0000	1.5000
10 AKA604	5.0000	1.5000	2.0000	0.3000	1500.0000	0.0	0.0	N	300.0000	1.0000
11 AKA296	1.5000	0.3000	0.3000	0.1500	300.0000	0.0	0.0	N	700.0000	1.5000
2 AKA295	2.0000	0.3000	0.3000	0.2000	300.0000	0.0	0.0	N	700.0000	1.5000
3 AKA294	2.0000	0.3000	0.3000	0.1500	500.0000	0.0	0.0	N	1000.0000	1.5000
4 AKA292	1.0000	0.1500	0.2000	0.2000	1500.0000	0.0	0.0	N	500.0000	1.0000
5 AKA291	3.0000	0.7000	0.7000	0.3000	1500.0000	0.0	0.0	N	700.0000	1.5000
6 AKA293	3.0000	0.7000	0.7000	0.2000	1500.0000	0.0	0.0	N	700.0000	1.5000
7 AKA105	15.0000	2.0000	3.0000	0.3000	1500.0000	1.0000	0.0	N	30.0000	1.5000
8 AKA106	3.0000	0.7000	1.5000	0.3000	1500.0000	0.5000	0.0	N	30.0000	1.0000
9 AKA107	5.0000	1.0000	2.0000	0.5000	300.0000	0.0	0.0	N	30.0000	1.5000
10 AKA108	3.0000	1.0000	2.0000	0.5000	1500.0000	0.0	0.0	N	30.0000	1.5000
11 AKA109	5.0000	0.7000	1.5000	0.7000	1500.0000	0.0	0.0	N	15.0000	1.0000
2 AKA110	3.0000	0.7000	1.5000	0.5000	1500.0000	0.0	0.0	N	10.0000	1.5000
3 AKA111	2.0000	0.7000	1.5000	0.3000	1500.0000	0.0	0.0	N	10.0000	1.5000
4 AKA112	3.0000	0.7000	1.5000	0.3000	1500.0000	0.0	0.0	N	10.0000	1.5000
5 AKA114	3.0000	0.7000	1.5000	0.3000	1500.0000	0.0	0.0	N	10.0000	1.5000
6 AKA113	3.0000	1.0000	1.5000	0.3000	1500.0000	0.0	0.0	N	15.0000	1.0000
7 AKA115	5.0000	0.7000	1.5000	0.5000	1500.0000	0.0	0.0	N	10.0000	1.5000
8 AKA116	3.0000	0.7000	1.5000	0.3000	1500.0000	0.7000	0.0	N	10.0000	1.5000
9 AKA606	2.0000	0.3000	0.5000	0.1500	300.0000	0.0	0.0	N	700.0000	1.5000
5 AKA609	7.0000	0.5000	1.5000	0.7000	300.0000	0.0	0.0	N	15.0000	1.0000
11/9 AKA117	1.0000	0.5000	1.5000	0.3000	1500.0000	0.7000	0.0	N	700.0000	1.5000
1 AKA118	1.5000	0.3000	0.7000	0.1000	700.0000	0.0	0.0	N	10.0000	1.5000
2 AKA119	3.0000	0.5000	1.5000	0.3000	1000.0000	0.0	0.0	N	700.0000	1.5000
3 AKA607	5.0000	0.7000	1.5000	0.3000	2000.0000	1.0000	0.0	N	700.0000	1.5000
4 AKA608	5.0000	1.0000	0.7000	0.3000	1500.0000	1.5000	0.0	N	300.0000	1.0000
5 AKA609	7.0000	1.5000	1.5000	0.5000	1500.0000	0.7000	0.0	N	700.0000	1.5000
6 AKA612	3.0000	1.0000	0.7000	0.3000	1000.0000	0.0	0.0	N	10.0000	1.5000
7 AKA613	3.0000	1.0000	0.7000	0.3000	700.0000	0.0	0.0	N	300.0000	1.0000
8 AKA610	3.0000	1.0000	1.5000	0.5000	1500.0000	0.0	0.0	N	700.0000	1.5000
9 AKA611	7.0000	1.5000	1.5000	0.7000	1000.0000	0.0	0.0	N	10.0000	1.5000
11/10 AKA605	5.0000	1.0000	1.5000	0.5000	1500.0000	0.5000	0.0	N	300.0000	2.0000

TABLE I

SAMPLE	BI PPM	CO PPM	CR PPM	LA PPM	NB PPM	NI PPM	PB PPM	SB PPM
1/5/ AKA496	0.0	0.0	0.0	0.0	10.0000	0.0	0.0	0.0
2 AKA498	0.0	0.0	0.0	0.0	10.0000	0.0	0.0	0.0
3 AKA193	0.0	0.0	0.0	0.0	15.0000	0.0	0.0	0.0
4 AKA194	0.0	0.0	0.0	0.0	20.0000	0.0	0.0	0.0
5 AKA195	0.0	0.0	0.0	0.0	5.0000	0.0	0.0	0.0
6 AKA297	0.0	0.0	0.0	0.0	5.0000	0.0	0.0	0.0
7 AKA298	0.0	0.0	0.0	0.0	10.0000	0.0	0.0	0.0
8 AKA275	0.0	0.0	0.0	0.0	70.0000	0.0	0.0	0.0
9 AKA276	0.0	0.0	0.0	0.0	150.0000	0.0	0.0	0.0
10 AKA278	0.0	0.0	0.0	0.0	30.0000	0.0	0.0	0.0
1/10 AKA277	0.0	0.0	0.0	0.0	30.0000	0.0	0.0	0.0
2 AKA279	0.0	0.0	0.0	0.0	10.0000	0.0	0.0	0.0
3 AKA270	0.0	0.0	0.0	0.0	10.0000	0.0	0.0	0.0
5 AKA299	0.0	0.0	0.0	0.0	30.0000	0.0	0.0	0.0
6 AKA300	0.0	0.0	0.0	0.0	20.0000	0.0	0.0	0.0
7 AKA601	0.0	0.0	0.0	0.0	70.0000	0.0	0.0	0.0
8 AKA602	0.0	0.0	0.0	0.0	20.0000	0.0	0.0	0.0
9 AKA603	10.0000	5.0000	0.0	0.0	15.0000	0.0	0.0	0.0
1/10 AKA604	0.0	10.0000	0.0	0.0	20.0000	0.0	0.0	0.0
1/10 AKA296	0.0	0.0	0.0	0.0	10.0000	0.0	0.0	0.0
2 AKA295	0.0	0.0	0.0	0.0	10.0000	0.0	0.0	0.0
3 AKA294	0.0	0.0	0.0	0.0	10.0000	0.0	0.0	0.0
4 AKA292	0.0	0.0	0.0	0.0	10.0000	0.0	0.0	0.0
5 AKA291	0.0	0.0	0.0	0.0	10.0000	0.0	0.0	0.0
6 AKA293	0.0	0.0	0.0	0.0	20.0000	0.0	0.0	0.0
7 AKA105	0.0	0.0	0.0	0.0	70.0000	0.0	0.0	0.0
8 AKA106	0.0	0.0	0.0	0.0	50.0000	0.0	0.0	0.0
9 AKA107	0.0	0.0	0.0	0.0	20.0000	0.0	0.0	0.0
1/10 AKA108	0.0	0.0	0.0	0.0	30.0000	0.0	0.0	0.0
/ AKA109	0.0	0.0	0.0	0.0	50.0000	0.0	0.0	0.0
2 AKAL10	0.0	0.0	0.0	0.0	10.0000	0.0	0.0	0.0
3 AKAL11	0.0	0.0	0.0	0.0	10.0000	0.0	0.0	0.0
4 AKA112	0.0	0.0	0.0	0.0	7.0000	0.0	0.0	0.0
5 AKAL14	0.0	0.0	0.0	0.0	15.0000	0.0	0.0	0.0
6 AKAL13	0.0	0.0	0.0	0.0	70.0000	0.0	0.0	0.0
7 AKAL15	0.0	0.0	0.0	0.0	15.0000	0.0	0.0	0.0
8 AKAL16	0.0	0.0	0.0	0.0	15.0000	0.0	0.0	0.0
9 AKA608	0.0	0.0	0.0	0.0	5.0000	0.0	0.0	0.0
1/10 AKA609	0.0	0.0	0.0	0.0	50.0000	0.0	0.0	0.0
6 AKAL12	0.0	0.0	0.0	0.0	150.0000	0.0	0.0	0.0
7 AKAL13	0.0	0.0	0.0	0.0	10.0000	0.0	0.0	0.0
8 AKAL10	0.0	0.0	0.0	0.0	7.0000	0.0	0.0	0.0
9 AKAL11	0.0	0.0	0.0	0.0	30.0000	0.0	0.0	0.0
1/10 AKA605	0.0	0.0	0.0	0.0	30.0000	0.0	0.0	0.0
2 AKAL18	0.0	0.0	0.0	0.0	15.0000	0.0	0.0	0.0
3 AKAL07	0.0	0.0	0.0	0.0	10.0000	0.0	0.0	0.0
4 AKA608	0.0	0.0	0.0	0.0	200.0000	0.0	0.0	0.0
5 AKAL09	0.0	0.0	0.0	0.0	30.0000	0.0	0.0	0.0
6 AKAL12	0.0	0.0	0.0	0.0	15.0000	0.0	0.0	0.0
7 AKAL13	0.0	0.0	0.0	0.0	10.0000	0.0	0.0	0.0
8 AKAL10	0.0	0.0	0.0	0.0	7.0000	0.0	0.0	0.0
9 AKAL11	0.0	0.0	0.0	0.0	30.0000	0.0	0.0	0.0
1/10 AKA605	0.0	0.0	0.0	0.0	30.0000	0.0	0.0	0.0

TABLE 1

SAMPLE	SC PPM	SN PPM	SR PPM	V PPM	W PPM	Y PPM	ZN PPM	AU PPM	ZR PPM
1/S AKA496	10.0000	500.0000	0.0	30.0000	0.0	15.0000	700.0000	300.0000	0.0200L
2 AKA498	10.0000	300.0000	0.0	30.0000	0.0	10.0000	1500.0000	100.0000	0.0200L
3 AKA193	0.0	N	10.0000	20.0000	0.0	10.0000	0.0	L	70.0000
4 AKA194	0.0	L	10.0000	0.0	0.0	15.0000	0.0	L	150.0000
5 AKA195	0.0	N	0.0	L	0.0	10.0000	0.0	N	150.0000
6 AKA297	0.0	L	0.0	N	0.0	10.0000	0.0	N	150.0000
7 AKA298	0.0	L	0.0	N	0.0	10.0000	0.0	N	150.0000
8 AKA275	10.0000	10.0000	150.0000	0.0	0.0	15.0000	30.0000	200.0000	0.0200L
9 AKA276	10.0000	0.0	L	300.0000	100.0000	50.0000	20.0000	200.0000	0.0200L
10 AKA278	15.0000	10.0000	200.0000	0.0	0.0	150.0000	20.0000	700.0000	0.0200L
11/b AKA277	10.0000	0.0	L	200.0000	150.0000	15.0000	20.0000	700.0000	0.0200L
12 AKA279	10.0000	0.0	L	150.0000	70.0000	15.0000	20.0000	200.0000	0.0200L
3 AKA271	7.0000	0.0	N	100.0000	20.0000	0.0	0.0	100.0000	0.0200L
4 AKA270	7.0000	0.0	N	100.0000	30.0000	0.0	0.0	100.0000	0.0200L
5 AKA299	0.0	L	0.0	N	0.0	30.0000	0.0	N	700.0000
6 AKA300	0.0	L	0.0	N	0.0	30.0000	0.0	N	300.0000
7 AKA601	0.0	L	0.0	N	0.0	30.0000	0.0	N	300.0000
8 AKA602	5.0000	0.0	L	150.0000	30.0000	15.0000	0.0	100.0000	0.0200L
9 AKA603	7.0000	10.0000	150.0000	0.0	0.0	30.0000	300.0000	70.0000	0.0200L
10 AKA604	15.0000	0.0	N	500.0000	150.0000	15.0000	0.0	100.0000	0.0200L
11 AKA296	0.0	L	0.0	N	0.0	30.0000	0.0	N	200.0000
12 AKA295	0.0	L	0.0	N	0.0	15.0000	0.0	N	300.0000
3 AKA294	0.0	L	0.0	N	0.0	20.0000	0.0	N	300.0000
4 AKA292	0.0	N	0.0	N	0.0	10.0000	0.0	N	200.0000
5 AKA291	10.0000	0.0	L	200.0000	100.0000	10.0000	20.0000	0.0	0.0200L
6 AKA293	5.0000	0.0	L	100.0000	30.0000	10.0000	20.0000	200.0000	0.0200L
7 AKA105	20.0000	0.0	L	150.0000	150.0000	15.0000	30.0000	200.0000	0.0200L
8 AKA106	10.0000	0.0	L	300.0000	150.0000	15.0000	30.0000	300.0000	0.0200L
9 AKA107	15.0000	0.0	L	300.0000	150.0000	15.0000	30.0000	150.0000	0.0200L
10 AKA108	15.0000	0.0	L	300.0000	150.0000	15.0000	30.0000	200.0000	0.0200L
11 AKA109	15.0000	0.0	L	300.0000	100.0000	10.0000	20.0000	200.0000	0.0200L
2 AKA110	15.0000	0.0	L	300.0000	100.0000	10.0000	20.0000	200.0000	0.0200L
3 AKA111	15.0000	0.0	L	300.0000	50.0000	10.0000	20.0000	150.0000	0.0200L
4 AKA112	15.0000	0.0	L	300.0000	70.0000	10.0000	20.0000	150.0000	0.0200L
5 AKA114	15.0000	0.0	L	300.0000	50.0000	10.0000	20.0000	100.0000	0.0200L
6 AKA113	10.0000	0.0	L	300.0000	70.0000	10.0000	20.0000	200.0000	0.0200L
7 AKA115	15.0000	0.0	L	300.0000	100.0000	10.0000	20.0000	200.0000	0.0200L
8 AKA116	15.0000	0.0	L	300.0000	50.0000	10.0000	20.0000	150.0000	0.0200L
9 AKA606	5.0000	0.0	L	100.0000	20.0000	0.0	0.0	200.0000	0.0200L
10 AKA117	5.0000	0.0	L	0.0	20.0000	150.0000	0.0	L	70.0000
11/b AKA118	5.0000	0.0	L	0.0	150.0000	20.0000	0.0	L	15.0000
12 AKA119	7.0000	0.0	N	200.0000	30.0000	0.0	0.0	300.0000	0.0200L
3 AKA607	10.0000	10.0000	150.0000	70.0000	0.0	0.0	0.0	150.0000	0.0200L
4 AKA608	10.0000	0.0	L	150.0000	100.0000	0.0	0.0	100.0000	0.0200L
5 AKA609	15.0000	0.0	L	300.0000	150.0000	0.0	0.0	100.0000	0.0200L
6 AKA612	10.0000	0.0	N	300.0000	100.0000	15.0000	20.0000	200.0000	0.0200L
7 AKA613	10.0000	0.0	N	200.0000	150.0000	15.0000	20.0000	200.0000	0.0200L
8 AKA610	15.0000	0.0	N	300.0000	150.0000	15.0000	20.0000	150.0000	0.0200L
9 AKA611	15.0000	0.0	N	300.0000	200.0000	15.0000	20.0000	150.0000	0.0200L
10 AKA605	10.0000	0.0	L	200.0000	15.0000	0.0	0.0	150.0000	0.0200L

TABLE 1

SAMPLE	FE PCT	MG PCT	CA PCT	MN PPM	AS PPM	B PPM	BA PPM
1/20 AKA617	7.0000	1.5000	1.5000	1000.0000	0.0	0.0	0.0
2 AKA620	3.0000	1.5000	0.7000	1000.0000	0.0	10.0000	500.0000
3 AKA619	3.0000	1.0000	0.7000	1000.0000	0.0	10.0000	300.0000
4 AKA618	3.0000	1.0000	0.7000	500.0000	0.0	10.0000	300.0000
5 AKA637	5.0000	1.5000	2.0000	1000.0000	0.0	10.0000	300.0000
6 AKA616	5.0000	1.5000	1.5000	1000.0000	0.0	10.0000	0.0
7 AKA636	3.0000	1.0000	0.7000	1000.0000	0.0	0.0	300.0000
8 AKA632	3.0000	0.7000	0.7000	1000.0000	0.0	0.0	300.0000
9 AKA615	7.0000	1.5000	1.5000	1000.0000	0.0	0.0	1.5000
0 AKA614	7.0000	1.5000	2.0000	1000.0000	0.0	10.0000	0.0
1 AKA635	3.0000	0.7000	0.7000	2.0000	0.0	0.0	700.0000
2 AKA634	5.0000	1.0000	0.7000	3.0000	0.0	0.0	300.0000
3 AKA633	3.0000	1.0000	0.7000	0.1500	300.0000	0.0	1.5000
4 AKA284	7.0000	1.5000	2.0000	0.3000	700.0000	0.0	1.5000
5 AKA102	7.0000	1.0000	0.5000	0.3000	1500.0000	0.0	1.5000
6 AKA280	3.0000	0.7000	0.7000	0.3000	1000.0000	0.0	1.5000
7 AKA281	3.0000	0.7000	1.0000	0.3000	1000.0000	0.0	1.5000
8 AKA101	3.0000	0.5000	0.1500	0.3000	1500.0000	0.0	1.5000
9 AKA282	3.0000	0.7000	0.7000	0.3000	700.0000	0.0	1.5000
0 AKA283	7.0000	1.5000	1.5000	0.7000	1500.0000	0.0	1.5000
1 AKA289	5.0000	1.0000	1.5000	0.3000	1000.0000	0.0	1.5000
2 AKA290	5.0000	0.7000	0.7000	0.5000	700.0000	0.0	1.5000
3 AKA288	5.0000	1.0000	1.5000	0.3000	1000.0000	0.0	2.0000
4 AKA287	5.0000	1.0000	1.5000	0.3000	1500.0000	0.0	2.0000
5 AKA286	5.0000	1.0000	1.0000	0.5000	1500.0000	0.0	2.0000
6 AKA285	5.0000	1.5000	3.0000	0.5000	1000.0000	0.0	2.0000
7 AKA865	10.0000	3.0000	3.0000	0.7000	1500.0000	0.0	2.0000
8 AKA866	5.0000	1.5000	1.5000	0.3000	1000.0000	0.0	2.0000
9 AKA631	5.0000	0.7000	0.7000	0.3000	1000.0000	0.0	2.0000
0 AKA630	3.0000	0.7000	0.7000	0.3000	700.0000	0.0	2.0000
1 AKA623	7.0000	1.5000	1.5000	0.3000	1000.0000	0.0	2.0000
2 AKA622	3.0000	1.0000	1.5000	0.3000	1500.0000	0.0	2.0000
3 AKA627	7.0000	1.5000	1.5000	0.5000	1000.0000	0.0	2.0000
4 AKA624	7.0000	1.5000	2.0000	0.7000	1000.0000	0.0	2.0000
5 AKA625	5.0000	1.0000	1.5000	0.5000	1000.0000	0.0	2.0000
6 AKA626	7.0000	1.5000	2.0000	0.5000	1000.0000	0.0	2.0000
7 AKA629	3.0000	1.0000	0.7000	0.3000	700.0000	0.0	2.0000
8 AKA628	7.0000	1.5000	1.5000	0.5000	1000.0000	0.0	2.0000
9 AKA621	3.0000	1.0000	1.5000	0.3000	1000.0000	0.0	2.0000
0 AKA438	15.0000	1.5000	2.0000	0.7000	1500.0000	0.0	2.0000
1 AKA439	10.0000	1.5000	1.5000	0.1500	1.0000	0.0	2.0000
2 AKA440	15.0000	1.5000	0.2000	1.0000	1500.0000	0.0	2.0000
3 AKA441	15.0000	1.5000	0.3000	1.0000	1500.0000	0.0	2.0000
4 AKA442	15.0000	1.5000	2.0000	0.7000	1500.0000	0.0	2.0000
5 AKA443	15.0000	2.0000	1.5000	1.0000	1500.0000	0.0	2.0000
6 AKA444	15.0000	3.0000	1.5000	1.0000	1500.0000	0.0	2.0000
7 AKA445	15.0000	1.5000	1.5000	0.7000	1000.0000	0.0	2.0000
8 AKA446	15.0000	1.5000	0.7000	1.0000	1500.0000	0.0	2.0000
9 AKA447	15.0000	1.5000	0.7000	1.0000	1500.0000	0.0	2.0000
0 AKA448	3.0000	0.3000	0.3000	0.3000	300.0000	0.0	2.0000

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TABLE I

SAMPLE	BI PPM	CO PPM	CR PPM	CU PPM	LA PPM	NI PPM	PB PPM	SB PPM
1/20/AKA617	0.0	N	20.0000	0.0	0.0	0.0	30.0000	0.0
2/ AKA620	0.0	N	15.0000	5.0000	0.0	0.0	10.0000	0.0
3 AKA619	0.0	N	7.0000	15.0000	0.0	0.0	7.0000	50.0000
4 AKA618	0.0	N	5.0000	15.0000	0.0	0.0	10.0000	30.0000
5 AKA637	0.0	N	10.0000	10.0000	0.0	0.0	30.0000	0.0
6 AKA616	0.0	N	7.0000	15.0000	0.0	0.0	10.0000	0.0
7 AKA636	0.0	N	5.0000	10.0000	0.0	0.0	10.0000	20.0000
8 AKA632	0.0	L	0.0	10.0000	5.0000	0.0	0.0	20.0000
9 AKA615	0.0	N	10.0000	15.0000	0.0	0.0	15.0000	0.0
10 AKA614	0.0	N	15.0000	10.0000	0.0	0.0	10.0000	0.0
11 AKA635	0.0	N	5.0000	20.0000	0.0	0.0	20.0000	0.0
12 AKA634	0.0	N	15.0000	15.0000	0.0	0.0	10.0000	0.0
13 AKA633	0.0	N	7.0000	10.0000	0.0	0.0	10.0000	0.0
14 AKA284	0.0	N	15.0000	15.0000	0.0	0.0	10.0000	0.0
15 AKA002	0.0	N	5.0000	15.0000	0.0	0.0	10.0000	0.0
16 AKA280	0.0	L	0.0	0.0	0.0	0.0	0.0	0.0
17 AKA281	0.0	N	0.0	10.0000	5.0000	0.0	0.0	0.0
18 SAK1001	0.0	N	5.0000	15.0000	30.0000	0.0	0.0	0.0
19 AKA282	0.0	N	0.0	L	0.0	0.0	0.0	0.0
20 AKA283	0.0	N	15.0000	70.0000	300.0000	20.0000	5.0000	0.0
21 AKA280	0.0	N	20.0000	30.0000	0.0	0.0	0.0	0.0
22 AKA290	0.0	N	7.0000	15.0000	0.0	0.0	10.0000	0.0
23 AKA288	0.0	N	7.0000	15.0000	30.0000	20.0000	0.0	0.0
24 AKA287	0.0	N	10.0000	20.0000	70.0000	30.0000	0.0	0.0
25 SAK285	0.0	N	10.0000	15.0000	150.0000	0.0	5.0000	0.0
26 AKA286	0.0	N	7.0000	15.0000	20.0000	0.0	0.0	0.0
27 AKA285	0.0	N	7.0000	15.0000	20.0000	0.0	0.0	0.0
28 AKA865	0.0	N	10.0000	30.0000	150.0000	20.0000	0.0	0.0
29 SAKA866	0.0	N	5.0000	30.0000	30.0000	0.0	0.0	0.0
30 AKA631	0.0	L	0.0	10.0000	7.0000	0.0	0.0	0.0
31 AKA630	0.0	N	7.0000	15.0000	7.0000	0.0	0.0	0.0
32 AKA623	0.0	N	10.0000	15.0000	30.0000	20.0000	0.0	0.0
33 AKA622	0.0	N	7.0000	15.0000	20.0000	0.0	0.0	0.0
34 AKA622	0.0	N	10.0000	15.0000	30.0000	30.0000	0.0	0.0
35 AKA627	0.0	N	10.0000	10.0000	30.0000	20.0000	5.0000	0.0
36 AKA624	0.0	N	10.0000	15.0000	70.0000	30.0000	0.0	0.0
37 AKA625	0.0	N	10.0000	20.0000	30.0000	20.0000	0.0	0.0
38 AKA626	0.0	N	15.0000	10.0000	30.0000	0.0	0.0	0.0
39 AKA622	0.0	N	0.0	10.0000	15.0000	30.0000	0.0	0.0
40 AKA629	0.0	N	7.0000	15.0000	20.0000	0.0	0.0	0.0
41 AKA628	0.0	N	10.0000	15.0000	30.0000	0.0	0.0	0.0
42 AKA621	0.0	N	10.0000	15.0000	70.0000	30.0000	0.0	0.0
43 AKA438	0.0	N	30.0000	100.0000	100.0000	70.0000	0.0	0.0
44 AKA439	0.0	N	30.0000	150.0000	70.0000	0.0	0.0	0.0
45 AKA440	0.0	N	50.0000	150.0000	150.0000	150.0000	5.0000	0.0
46 AKA441	0.0	N	70.0000	200.0000	150.0000	70.0000	0.0	0.0
47 AKA442	0.0	N	20.0000	70.0000	70.0000	30.0000	0.0	0.0
48 AKA443	0.0	N	30.0000	100.0000	100.0000	70.0000	0.0	0.0
49 AKA444	0.0	N	30.0000	100.0000	70.0000	0.0	0.0	0.0
50 AKA445	0.0	N	20.0000	70.0000	70.0000	0.0	0.0	0.0
51 AKA446	0.0	N	20.0000	150.0000	70.0000	10.0000	150.0000	30.0000
52 AKA447	0.0	N	50.0000	150.0000	70.0000	10.0000	150.0000	15.0000
53 AKA448	0.0	N	0.0	L	0.0	0.0	0.0	0.0

TABLE 1

SAMPLE	SC PPM	SR PPM	SN PPM	W PPM	Y PPM	ZN PPM	AU PPM
1/20 AKA617	15.0000	300.0000	150.0000	0.0	N	15.0000	0.0200L
2 AKA620	10.0000	0.0	L	200.0000	100.0000	0.0	0.0200L
3 AKA619	10.0000	0.0	L	200.0000	100.0000	0.0	0.0200L
4 AKA618	7.0000	0.0	L	200.0000	100.0000	0.0	0.0200L
5 AKA637	15.0000	0.0	N	300.0000	150.0000	0.0	0.0200L
6 AKA616	15.0000	0.0	N	300.0000	150.0000	0.0	0.0200L
7 AKA636	10.0000	0.0	N	300.0000	150.0000	0.0	0.0200L
8 AKA632	7.0000	0.0	N	300.0000	150.0000	0.0	0.0200L
9 AKA615	15.0000	0.0	N	300.0000	150.0000	0.0	0.0200L
1/21 AKA614	15.0000	0.0	N	300.0000	150.0000	0.0	0.0200L
1 AKA635	7.0000	0.0	N	300.0000	150.0000	0.0	0.0200L
2 AKA634	15.0000	0.0	N	300.0000	150.0000	0.0	0.0200L
3 AKA633	10.0000	0.0	N	300.0000	150.0000	0.0	0.0200L
YAKA284	20.0000	0.0	N	300.0000	150.0000	0.0	0.0200L
SAKA102	15.0000	0.0	N	300.0000	150.0000	0.0	0.0200L
LAKA280	15.0000	0.0	N	300.0000	150.0000	0.0	0.0200L
JAKA281	15.0000	0.0	N	300.0000	150.0000	0.0	0.0200L
§ AK101	10.0000	0.0	N	30.0000	15.0000	0.0	0.0200L
9 AKA282	10.0000	0.0	N	150.0000	100.0000	0.0	0.0200L
1/22 AKA283	15.0000	15.0000	300.0000	150.0000	0.0	300.0000	0.0200L
1 AKA289	15.0000	30.0000	300.0000	150.0000	0.0	300.0000	0.0200L
2 AKA290	15.0000	0.0	N	200.0000	150.0000	0.0	0.0200L
3 AKA288	10.0000	0.0	L	300.0000	150.0000	0.0	0.0200L
YAKA287	15.0000	15.0000	300.0000	150.0000	0.0	300.0000	0.0200L
SAKA286	10.0000	15.0000	200.0000	100.0000	0.0	200.0000	0.0200L
6 AKA285	15.0000	0.0	L	500.0000	150.0000	0.0	0.0200L
7 AKA865	15.0000	0.0	N	500.0000	300.0000	0.0	0.0200L
§ AKA866	7.0000	30.0000	200.0000	150.0000	0.0	30.0000	0.0200L
9 AKA631	15.0000	0.0	L	150.0000	70.0000	0.0	0.0200L
1/23 AKA630	10.0000	0.0	L	200.0000	70.0000	0.0	0.0200L
1 AKA623	20.0000	10.0000	N	150.0000	150.0000	0.0	0.0200L
LAKA622	15.0000	10.0000	N	200.0000	150.0000	0.0	0.0200L
3 AKA627	15.0000	0.0	L	300.0000	200.0000	0.0	0.0200L
YAKA624	15.0000	0.0	L	300.0000	200.0000	0.0	0.0200L
SAKA625	15.0000	10.0000	N	300.0000	150.0000	50.0000	0.0200L
6 AKA626	15.0000	0.0	N	300.0000	200.0000	15.0000	0.0200L
7 AKA629	10.0000	0.0	L	300.0000	70.0000	0.0	0.0200L
§ AKA628	15.0000	0.0	N	300.0000	200.0000	15.0000	0.0200L
9 AKA621	15.0000	0.0	N	300.0000	150.0000	15.0000	0.0200L
1/24 AKA438	30.0000	0.0	N	500.0000	300.0000	50.0000	0.0200L
1 AKA439	20.0000	0.0	N	500.0000	300.0000	20.0000	0.0200L
2 AKA440	30.00000	0.0	N	100.0000	300.0000	30.0000	0.0200L
3 AKA441	20.0000	0.0	N	100.0000	300.0000	50.0000	0.0200L
4 AKA442	30.0000	0.0	N	700.0000	300.0000	30.0000	0.0200L
5 AKA443	20.0000	0.0	N	700.0000	300.0000	0.0	0.0200L
6 AKA444	15.0000	0.0	N	700.0000	500.0000	20.0000	0.0200L
7 AKA445	15.0000	0.0	N	700.0000	300.0000	20.0000	0.0200L
§ AKA446	20.0000	0.0	N	200.0000	300.0000	20.0000	0.0800
9 AKA447	0.0	0.0	L	200.0000	300.0000	0.0	0.0400
1/25 AKA448	15.0000	200.0000	30.00000	50.0000	0.0	1000.0000	0.0200L

TABLE 1

SAMPLE	FE PCT	MG PCT	CA PCT	MN PPM	AG PPM	B PPM	BA PPM	BE PPM
1251 AKA449	15.0000	1.0000	1.5000	0.7000	700.0000	15.0000	1000.0000	0.0 L
2 AKA450	10.0000	0.7000	1.0000	0.5000	700.0000	0.0 L	1500.0000	1.0000
3 AKA452	7.0000	1.5000	1.5000	0.7000	1500.0000	0.0 L	20.0000	500.0000
4 AKA454	10.0000	1.5000	2.0000	0.7000	1500.0000	0.0 L	30.0000	700.0000
5 AKA455	7.0000	1.5000	2.0000	0.7000	1500.0000	0.0 L	50.0000	700.0000
6 AKA456	3.0000	0.7000	1.0000	0.3000	700.0000	0.0 N	10.0000	1500.0000
7 AKA457	3.0000	0.7000	1.0000	0.3000	300.0000	0.0 N	0.0 N	1000.0000
8 AKA458	5.0000	1.0000	1.5000	0.3000	500.0000	0.0 N	0.0 N	1000.0000
9 AKA459	5.0000	0.7000	1.5000	0.5000	700.0000	0.0 N	0.0 N	1000.0000
1260 AKA460	3.0000	0.7000	0.7000	0.2000	1000.0000	0.0 N	15.0000	700.0000
1 AKA461	10.0000	0.7000	0.7000	0.5000	2000.0000	0.0 N	30.0000	1000.0000
2 AKA462	10.0000	0.7000	0.5000	0.5000	2000.0000	0.0 N	30.0000	1000.0000
3 AKA464	3.0000	0.7000	0.3000	0.3000	700.0000	0.0 N	10.0000	1000.0000
5 AKA465	7.0000	0.7000	0.3000	0.5000	1000.0000	0.0 N	10.0000	700.0000
6 AKA466	3.0000	0.7000	0.3000	0.1500	300.0000	0.0 N	0.0 N	1000.0000

TABLE I

SAMPLE	BI PPM	CO PPM	CR PPM	CU PPM	LA PPM	MO PPM	NI PPM	PB PPM	SB PPM	PPM
1/25 AK449	0.0	N	10.0000	70.0000	20.0000	0.0	N	15.0000	0.0	N
2 AK450	0.0	N	10.0000	20.0000	30.0000	0.0	N	10.0000	50.0000	0.0
3 AK452	0.0	N	20.0000	70.0000	10.0000	0.0	N	10.0000	20.0000	0.0
4 AK454	0.0	N	30.0000	70.0000	10.0000	0.0	N	10.0000	30.0000	0.0
5 AK455	0.0	N	30.0000	50.0000	10.0000	0.0	N	10.0000	20.0000	0.0
6 AK456	0.0	L	0.0	10.0000	7.0000	20.0000	0.0	10.0000	5.0000	15.0000
7 AK457	0.0	L	0.0	10.0000	10.0000	0.0	N	0.0	10.0000	0.0
8 AK458	0.0	N	5.0000	20.0000	30.0000	0.0	N	0.0	10.0000	0.0
9 AK459	0.0	L	5.0000	30.0000	7.0000	0.0	N	10.0000	10.0000	0.0
10 AK460	0.0	N	0.0	15.0000	10.0000	20.0000	0.0	5.0000	70.0000	0.0
11 AK461	0.0	N	7.0000	20.0000	15.0000	50.0000	0.0	10.0000	20.0000	0.0
12 AK462	0.0	N	7.0000	20.0000	15.0000	50.0000	7.0000	10.0000	15.0000	30.0000
13 AK464	0.0	N	5.0000	100.0000	100.0000	0.0	L	0.0	10.0000	0.0
14 AK465	0.0	N	0.0	10.0000	7.0000	20.0000	0.0	10.0000	10.0000	0.0
15 AK466	0.0	N	0.0	0.0	0.0	0.0	N	0.0	10.0000	10.0000

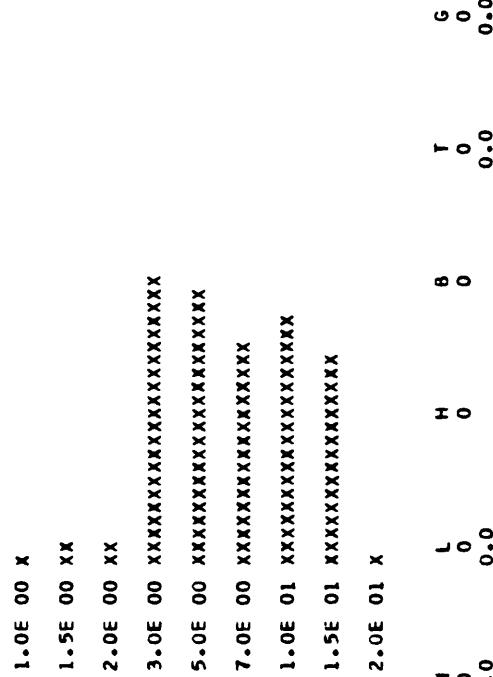
TABLE I

SAMPLE	SC PPM	SN PPM	SR PPM	W PPM	Y PPM	ZN PPM	LR PPM	AU PPM
1251 AKA449	10.0000	0.0	L	300.0000	150.0000	0.0	N	200.0000
1252 AKA450	7.0000	0.0	N	200.0000	150.0000	0.0	N	200.0000
1253 AKA451	15.0000	15.0000	300.0000	200.0000	0.0	N	15.0000	0.0200L
1254 AKA452	30.0000	15.0000	300.0000	200.0000	0.0	N	20.0000	0.0200L
1255 AKA453	30.0000	20.0000	500.0000	200.0000	0.0	N	20.0000	0.0200L
1256 AKA454	5.0000	0.0	N	200.0000	100.0000	0.0	N	300.0000
1257 AKA455	7.0000	0.0	L	150.0000	70.0000	0.0	N	10.0000
1258 AKA456	7.0000	0.0	L	300.0000	150.0000	0.0	N	200.0000
1259 AKA457	10.0000	0.0	N	200.0000	150.0000	0.0	N	200.0000
1260 AKA458	10.0000	0.0	N	150.0000	70.0000	0.0	N	20.0000
1261 AKA459	15.0000	0.0	N	200.0000	100.0000	0.0	N	30.0000
1262 AKA460	15.0000	0.0	L	100.0000	30.0000	0.0	N	15.0000
1263 AKA461	5.0000	0.0	N	100.0000	30.0000	0.0	N	10.0000
1264 AKA462	7.0000	0.0	N	0.0	L	30.0000	0.0	500.0000
1265 AKA463	15.0000	0.0	N	200.0000	100.0000	0.0	N	20.0000
1266 AKA464	15.0000	0.0	N	200.0000	70.0000	0.0	N	20.0000
1267 AKA465	15.0000	0.0	N	200.0000	70.0000	0.0	N	300.0000
1268 AKA466	5.0000	0.0	N	150.0000	30.0000	0.0	N	10.0000

FREQUENCY TABLE FOR COLUMN 1 ( FE PCT )

LIMITS	LOWER - UPPER	FREQ	FREQ CUM	PERCENT	PERCENT FREQ CUM
3.8E-02	- 5.6E-02	0	0	0.0	0.0
5.6E-02	- 8.3E-02	0	0	0.0	0.0
8.3E-02	- 1.2E-01	0	0	0.0	0.0
1.2E-01	- 1.8E-01	0	0	0.0	0.0
1.8E-01	- 2.6E-01	0	0	0.0	0.0
2.6E-01	- 3.8E-01	2	2	0.16	0.16
3.8E-01	- 5.6E-01	0	2	0.0	0.16
5.6E-01	- 8.3E-01	5	7	0.39	0.55
8.3E-01	- 1.2E-00	7	14	0.55	1.10
1.2E-00	- 1.8E-00	20	34	1.57	2.68
1.8E-00	- 2.6E-00	22	56	1.73	4.41
2.6E-00	- 3.8E-00	279	335	21.97	26.38
3.8E-00	- 5.6E-00	266	601	20.94	47.32
5.6E-00	- 8.3E-00	214	815	16.85	64.17
8.3E-00	- 1.2E-01	241	1056	18.98	83.15
1.2E-01	- 1.8E-01	204	1260	16.06	99.21
1.8E-01	- 2.6E-01	10	1270	0.79	100.00

HISTOGRAM FOR COLUMN 1 ( FE PCT )



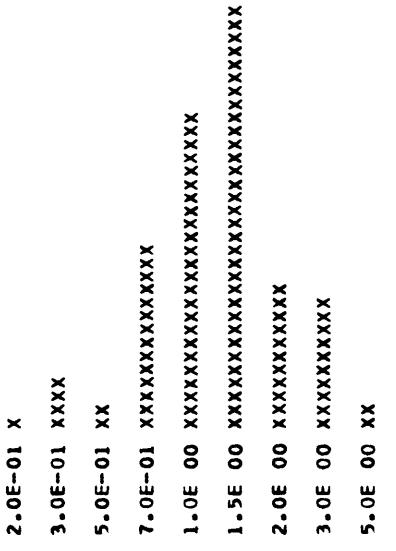
N	L	H	B	T	G
0	0	0	0	0	0
0.0	0.0	0.0	0.0	0.0	0.0

ANALYTICAL VALUES  
MAXIMUM = 2.00000E 01  
MINIMUM = 3.00000E-01  
GEOMETRIC MEAN = 6.15155E 00  
GEOMETRIC DEVIATION = 1.90248E 00

FREQUENCY TABLE FOR COLUMN 2 ( MG PCT )

LIMITS LOWER - UPPER	FREQ	FREQ CUM	PERCENT FREQ	PERCENT FREQ CUM
1.8E-02 - 2.6E-02	0	0	0.0	0.0
2.6E-02 - 3.8E-02	0	0	0.0	0.0
3.8E-02 - 5.6E-02	0	0	0.0	0.0
5.6E-02 - 8.3E-02	5	5	0.39	0.39
8.3E-02 - 1.2E-01	0	5	0.0	0.39
1.2E-01 - 1.8E-01	3	8	0.24	0.63
1.8E-01 - 2.6E-01	9	17	0.71	1.34
2.6E-01 - 3.8E-01	45	62	3.54	4.88
3.8E-01 - 5.6E-01	22	84	1.73	6.61
5.6E-01 - 8.3E-01	177	261	13.94	20.55
8.3E-01 - 1.2E-00	304	565	23.94	44.49
1.2E-00 - 1.8E-00	402	967	31.65	76.14
1.8E-00 - 2.6E-00	137	1104	10.79	86.93
2.6E-00 - 3.8E-00	121	1225	9.53	96.46
3.8E-00 - 5.6E-00	31	1256	2.44	98.90
5.6E-00 - 8.3E-00	14	1270	1.10	100.00

HISTOGRAM FOR COLUMN 2 ( MG PCT )



104

N	L	H	B	T	G	ANALYTICAL VALUES
0.0	0.0	0.0	0	0.0	0.0	1270

MAXIMUM = 7.00000E 00

MINIMUM = 7.00000E-02

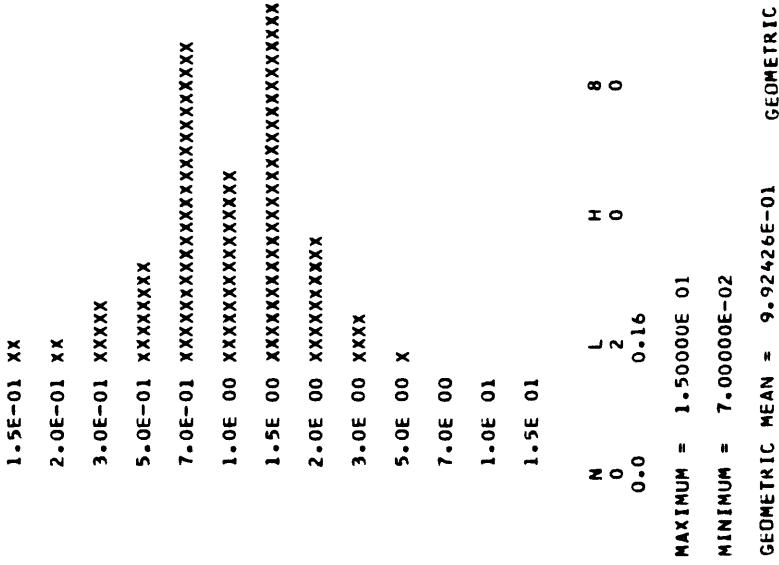
GEOMETRIC MEAN = 1.26843E 00

GEOMETRIC DEVIATION = 1.88177E 00

## FREQUENCY TABLE FOR COLUMN 3 ( CA PCT )

LIMITS	LOWER -	UPPER	FREQ	FREQ	PERCENT	PERCENT
			CUM	FREQ	FREQ	FREQ CUM
3.8E-02	-	5.6E-02	0	0	0.0	0.0
5.6E-02	-	8.3E-02	1	1	0.08	0.08
8.3E-02	-	1.2E-01	0	1	0.0	0.08
1.2E-01	-	1.8E-01	27	28	2.13	2.20
1.8E-01	-	2.6E-01	21	49	1.65	3.86
2.6E-01	-	3.8E-01	58	107	4.57	8.43
3.8E-01	-	5.6E-01	97	204	7.64	16.06
5.6E-01	-	8.3E-01	316	520	24.88	40.94
8.3E-01	-	1.2E-00	194	714	15.28	56.22
1.2E-00	-	1.8E-00	356	1070	28.03	84.25
1.8E-00	-	2.6E-00	122	1192	9.61	93.86
2.6E-00	-	3.8E-00	52	1244	4.09	97.95
3.8E-00	-	5.6E-00	0	18	1.42	99.37
5.6E-00	-	8.3E-00	4	1266	0.31	99.69
8.3E-00	-	1.2E-01	1	1267	0.08	99.76
1.2E-01	-	1.8E-01	1	1268	0.08	99.84

## HISTOGRAM FOR COLUMN 3 ( CA PCT )



105

MAXIMUM = 1.50000E 01

MINIMUM = 7.00000E-02

GEOMETRIC MEAN = 9.92426E-01

GEOMETRIC DEVIATION = 1.97143E 00

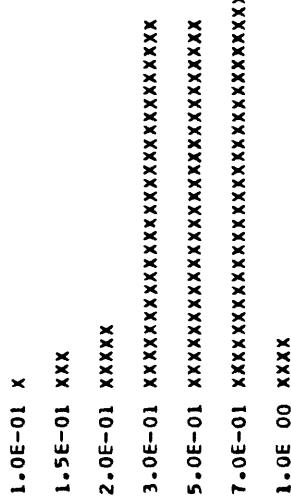
N	L	H	T	G
0	2	0	0	0
0.0	0.16		0.0	1.266

ANALYTICAL VALUES

FREQUENCY TABLE FOR COLUMN 4 ( TI PCT )

LIMITS LOWER - UPPER	FREQ	FREQ CUM	PERCENT FREQ	PERCENT FREQ CUM
1.8E-03 - 2.6E-03	0	0	0.0	0.0
2.6E-03 - 3.8E-03	0	0	0.0	0.0
3.8E-03 - 5.6E-03	0	0	0.0	0.0
5.6E-03 - 8.3E-03	0	0	0.0	0.0
8.3E-03 - 1.2E-02	0	0	0.0	0.0
1.2E-02 - 1.8E-02	0	0	0.0	0.0
1.8E-02 - 2.6E-02	0	0	0.0	0.0
2.6E-02 - 3.8E-02	0	0	0.0	0.0
3.8E-02 - 5.6E-02	2	2	0.16	0.16
5.6E-02 - 8.3E-02	6	8	0.47	0.63
8.3E-02 - 1.2E-01	11	19	0.87	1.50
1.2E-01 - 1.8E-01	35	54	2.76	4.25
1.8E-01 - 2.6E-01	67	121	5.28	9.53
2.6E-01 - 3.8E-01	352	473	27.72	37.24
3.8E-01 - 5.6E-01	356	829	28.03	65.28
5.6E-01 - 8.3E-01	393	1222	30.94	96.22
8.3E-01 - 1.2E-01	48	1270	3.78	100.00

HISTOGRAM FOR COLUMN 4 ( TI PCT )



106

N	L	H	B	T	G	ANALYTICAL VALUES
0.0	0.0	0.0	0	0	0.0	1270

MAXIMUM = 1.00000E 00

MINIMUM = 5.00000E-02

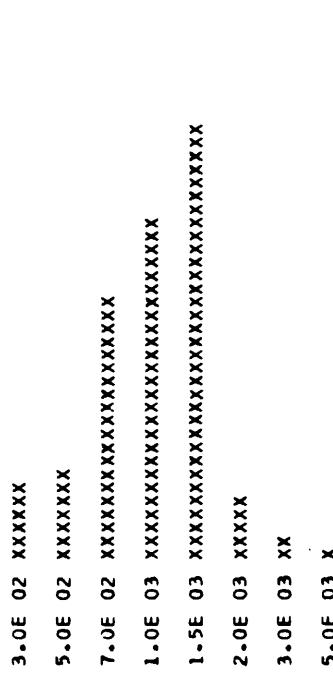
GEOMETRIC MEAN = 4.43667E-01

GEOMETRIC DEVIATION = 1.64014E 00

FREQUENCY TABLE FOR COLUMN 5 ( MN PPM )

LIMITS LOWER - UPPER	FREQ	FREQ CUM	PERCENT FREQ	PERCENT FREQ CUM
8.3E 00 - 1.2E 01	0	0	0.0	0.0
1.2E 01 - 1.8E 01	0	0	0.0	0.0
1.8E 01 - 2.6E 01	0	0	0.0	0.0
2.6E 01 - 3.8E 01	0	0	0.0	0.0
3.8E 01 - 5.6E 01	0	0	0.0	0.0
5.6E 01 - 8.3E 01	1	1	0.08	0.08
8.3E 01 - 1.2E 02	1	2	0.08	0.16
1.2E 02 - 1.8E 02	4	6	0.31	0.47
1.8E 02 - 2.6E 02	6	12	0.47	0.94
2.6E 02 - 3.8E 02	70	82	5.51	6.46
3.8E 02 - 5.6E 02	87	169	6.85	13.31
5.6E 02 - 8.3E 02	419	19.69	32.99	
8.3E 02 - 1.2E 03	250	749	25.98	58.98
1.2E 03 - 1.8E 03	424	1173	33.39	92.36
1.8E 03 - 2.6E 03	66	1239	5.20	97.56
2.6E 03 - 3.8E 03	24	1263	1.89	99.45
3.8E 03 - 5.6E 03	7	1270	0.55	100.00

HISTOGRAM FOR COLUMN 5 ( MN PPM )



107

N	L	H	B	T	G	ANALYTICAL VALUES
0.0	0.0	0	0	0	0.0	1270

MAXIMUM = 5.00000E 03

MINIMUM = 7.00000E 01

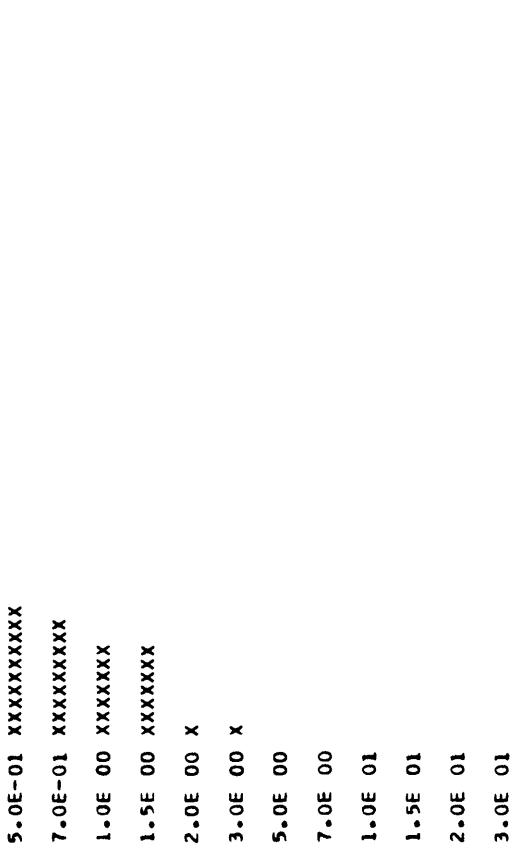
GEOMETRIC MEAN = 9.99331E 02

GEOMETRIC DEVIATION = 1.70706E 00

## FREQUENCY TABLE FOR COLUMN 6 ( AG PPM )

LIMITS	LOWER - UPPER	FREQ	FREQ	PERCENT
		CUM	FREQ	FREQ CUM
3.8E-01	- 5.6E-01	129	129	10.16
5.6E-01	- 8.3E-01	108	237	8.50
8.3E-01	- 1.2E 00	93	330	7.32
1.2E 00	- 1.8E 00	92	422	7.24
1.8E 00	- 2.6E 00	10	432	0.79
2.6E 00	- 3.8E 00	15	447	1.18
3.8E 00	- 5.6E 00	5	452	0.39
5.6E 00	- 8.3E 00	6	458	0.47
8.3E 00	- 1.2E 01	0	458	0.0
1.2E 01	- 1.8E 01	4	462	0.31
1.8E 01	- 2.6E 01	0	462	0.0
2.6E 01	- 3.8E 01	3	465	0.24
3.8E 01	- 5.6E 01	1	466	0.08

## HISTOGRAM FOR COLUMN 6 ( AG PPM )

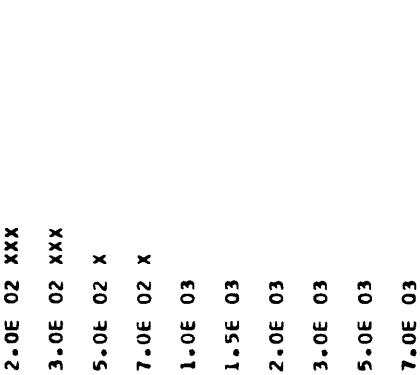


108

N	L	H	B	T	G	ANALYTICAL VALUES
261	543	0	0	0	0	466
20.55	42.76					
MAXIMUM =	5.00000E 01					
MINIMUM =	5.00000E-01					
GEOMETRIC MEAN =	9.52757E-01					
GEOMETRIC DEVIATION =	2.01317E 00					

FREQUENCY TABLE FOR COLUMN  $T$  ( AS PPM )

LIMITS LOWER - UPPER	FREQ	FREQ	PERCENT FREQ CUM
1.8E 02 - 2.6E 02	02	38	2.99
2.6E 02 - 3.4E 02	35	73	2.76
3.4E 02 - 5.6E 02	02	87	1.10
5.6E 02 - 8.3E 02	02	12	0.94
8.3E 02 - 1.2E 03	03	1	0.08
1.2E 03 - 1.8E 03	03	4	0.31
1.8E 03 - 2.6E 03	03	0	0.0
2.6E 03 - 3.8E 03	03	5	0.39
3.8E 03 - 5.6E 03	03	0	0.0
5.6E 03 - 8.3E 03	03	1	0.08

HISTOGRAM FOR COLUMN  $T$  ( AS PPM )

109

N	L	H	B	T	G	ANALYTICAL VALUES
1057	103	0	0	0	0	110
83.23	8.11			0.0	0.0	

MAXIMUM = 7.00000E 03

MINIMUM = 2.00000E 02

GEOMETRIC MEAN = 3.73864E 02

GEOMETRIC DEVIATION = 2.11856E 00

## FREQUENCY TABLE FOR COLUMN 8 ( B PPM )

LIMITS LOWER - UPPER	FREQ	FREQ CUM	PERCENT FREQ	PERCENT FREQ CUM
8.3E 00 - 1.2E 01	1.2E 01	134	134	10.55
1.2E 01 - 1.8E 01	1.8E 01	76	210	5.98
1.8E 01 - 2.6E 01	2.6E 01	106	316	8.35
2.6E 01 - 3.8E 01	3.8E 01	200	516	15.75
3.8E 01 - 5.6E 01	5.6E 01	118	634	9.29
5.6E 01 - 8.3E 01	8.3E 01	114	748	8.98
8.3E 01 - 1.2E 02	1.2E 02	62	810	4.88
1.2E 02 - 1.8E 02	1.8E 02	67	877	5.28
1.8E 02 - 2.6E 02	2.6E 02	35	912	2.76
2.6E 02 - 3.8E 02	3.8E 02	22	934	1.73
3.8E 02 - 5.6E 02	5.6E 02	7	941	0.55
5.6E 02 - 8.3E 02	8.3E 02	1	942	0.08
8.3E 02 - 1.2E 03	1.2E 03	2	944	0.16
1.2E 03 - 1.8E 03	1.8E 03	1	945	0.08
1.8E 03 - 2.6E 03	2.6E 03	4	949	0.31
				74.72

## HISTOGRAM FOR COLUMN 8 ( B PPM )

1.0E 01 XXXXXXXXXXXX

1.5E 01 XXXXXX

2.0E 01 XXXXXXXX

3.0E 01 XXXXXXXXXXXXXXX

5.0E 01 XXXXXXXXX

7.0E 01 XXXXXXXX

1.0E 02 XXXXX

1.5E 02 XXXXX

2.0E 02 XXX

3.0E 02 XX

5.0E 02 X

7.0E 02

1.0E 03

1.5E 03

2.0E 03

ANALYTICAL  
VALUES

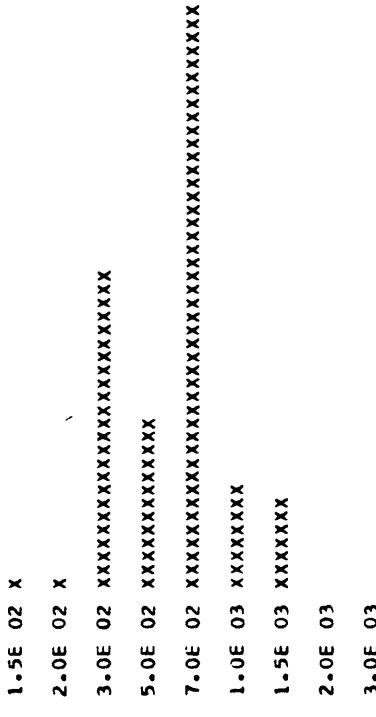
N	L	H	B	T	G
180	141	0	0	0	0
14.17	11.10				949

MAXIMUM = 2.00000E 03      GEOMETRIC MEAN = 3.96170E 01  
 MINIMUM = 1.00000E 01      GEOMETRIC DEVIATION = 2.70372E 00

## FREQUENCY TABLE FOR COLUMN 9 ( BA PPM )

LOWER LIMITS	UPPER	FREQ	FREQ CUM	PERCENT	FREQ	PERCENT
				FREQ	CUM	FREQ CUM
1.8E 01 -	2.6E 01	0	0	0.0	0.0	0.0
2.6E 01 -	3.8E 01	0	0	0.0	0.0	0.0
3.8E 01 -	5.6E 01	0	0	0.0	0.0	0.0
5.6E 01 -	8.3E 01	0	0	0.0	0.0	0.0
8.3E 01 -	1.2E 02	3	3	0.24	0.24	0.24
1.2E 02 -	1.8E 02	16	19	1.26	1.50	1.50
1.8E 02 -	2.6E 02	14	33	1.10	2.60	2.60
2.6E 02 -	3.8E 02	309	342	24.33	26.93	26.93
3.8E 02 -	5.6E 02	166	508	13.07	40.00	40.00
5.6E 02 -	8.3E 02	565	1073	44.49	84.49	84.49
8.3E 02 -	1.2E 03	102	1175	8.03	92.52	92.52
1.2E 03 -	1.8E 03	88	1263	6.93	99.45	99.45
1.8E 03 -	2.6E 03	1	1264	0.08	99.53	99.53
2.6E 03 -	3.8E 03	5	1269	0.39	99.92	99.92

## HISTOGRAM FOR COLUMN 9 ( BA PPM )



///

N	L	H	B	T	G	ANALYTICAL VALUES
0	1	0	0	0	0	1269
0.0	0.08			0.0	0.0	

MAXIMUM = 3.00000E 03

MINIMUM = 1.00000E 02

GEOMETRIC MEAN = 5.72919E 02

GEOMETRIC DEVIATION = 1.66935E 00

## FREQUENCY TABLE FOR COLUMN 10 ( BE PPM )

LIMITS LOWER - UPPER	FREQ	FREQ CUM	PERCENT FREQ CUM
8.3E-01 - 1.2E 00	291	291	22.91
1.2E 00 - 1.8E 00	398	689	31.34
1.8E 00 - 2.6E 00	109	798	8.58
2.6E 00 - 3.8E 00	100	898	7.87
3.8E 00 - 5.6E 00	22	920	1.73
5.6E 00 - 8.3E 00	7	927	0.55
8.3E 00 - 1.2E 01	3	930	0.24
1.2E 01 - 1.8E 01	2	932	0.16
1.8E 01 - 2.6E 01	1	933	0.08

## HISTOGRAM FOR COLUMN 10 ( BE PPM )

1.0E 00 XXXXXXXXXXXXXXXXXXXXXXXXX

1.5E 00 XXXXXXXXXXXXXXXXXXXXXXXXX

2.0E 00 XXXXXXXXX

3.0E 00 XXXXXXXX

5.0E 00 XX

7.0E 00 X

1.0E 01

1.5E 01

2.0E 01

N	L	H	B	T	G ANALYTICAL VALUES
73 5.75	264 20.79	0	0	0	0 0 933 0.0

MAXIMUM = 2.00000E 01

MINIMUM = 1.00000E 00

GEOMETRIC MEAN = 1.55372E 00

GEOMETRIC DEVIATION = 1.55255E 00

FREQUENCY TABLE FOR COLUMN 11 ( BI PPM )

LIMITS	LOWER - UPPER	FREQ	FREQ	PERCENT	PERCENT
		CUM	FREQ	FREQ	CUM
8.3E 00 -	1.2E 01	5	5	0.39	0.39
1.2E 01 -	1.8E 01	2	7	0.16	0.55
1.8E 01 -	2.6E 01	5	12	0.39	0.94
2.6E 01 -	3.8E 01	3	15	0.24	1.18
3.8E 01 -	5.6E 01	2	17	0.16	1.34
5.6E 01 -	8.3E 01	1	18	0.08	1.42

HISTOGRAM FOR COLUMN 11 ( BI PPM )

N	L	H	B	T	G	ANALYTICAL
1240 97.64	1.2 0.94	0	0	0	0	VALUES 18 0.0

MAXIMUM = 7.00000E 01

MINIMUM = 1.00000E 01

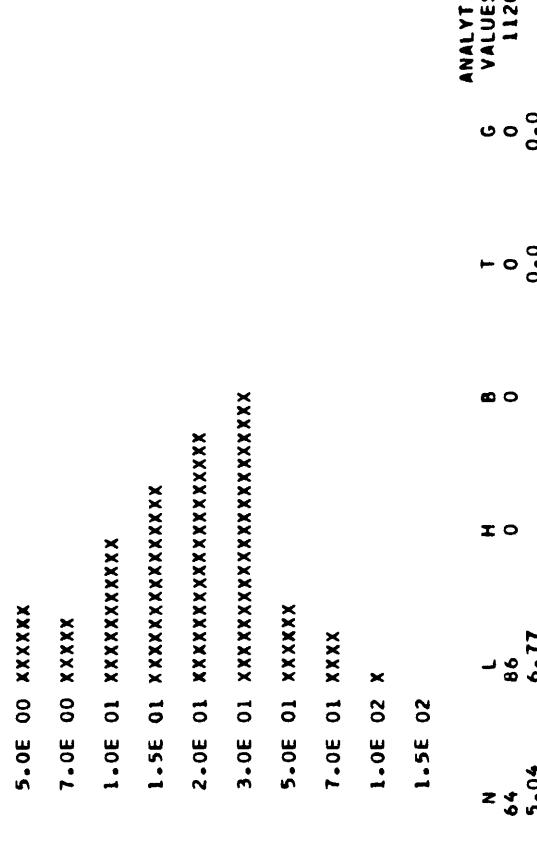
GEOMETRIC MEAN = 2.02914E 01

GEOMETRIC DEVIATION = 1.83871E 00

## FREQUENCY TABLE FOR COLUMN 12 ( CO PPM )

LIMITS	LOWER - UPPER	FREQ	FREQ	PERCENT	PERCENT
		CUM	FREQ	FREQ CUM	FREQ CUM
3.8E 00	- 5.6E 00	79	79	6.22	6.22
5.6E 00	- 8.3E 00	60	139	4.72	10.94
8.3E 00	- 1.2E 01	141	280	11.10	22.05
1.2E 01	- 1.8E 01	196	476	15.43	37.48
1.8E 01	- 2.6E 01	241	717	18.98	56.46
2.6E 01	- 3.8E 01	274	991	21.57	78.03
3.8E 01	- 5.6E 01	73	1064	5.75	83.78
5.6E 01	- 8.3E 01	45	1109	3.54	87.32
8.3E 01	- 1.2E 02	9	1118	0.71	88.03
1.2E 02	- 1.8E 02	2	1120	0.16	88.19

## HISTOGRAM FOR COLUMN 12 ( CO PPM )

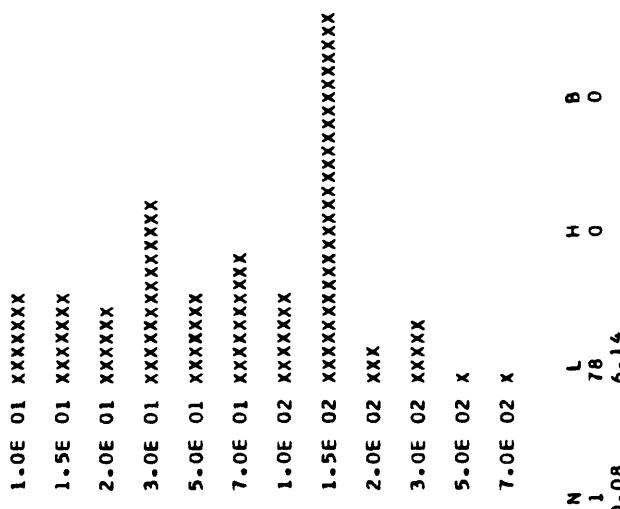


N L H B T G ANALYTICAL  
64 86 0 0 0 0 VALUES  
5.04 6.77 0.0 0.0 0.0 0.0  
MAXIMUM = 1.50000E 02  
MINIMUM = 5.00000E 00  
GEOMETRIC MEAN = 1.87215E 01  
GEOMETRIC DEVIATION = 1.95952E 00

FREQUENCY TABLE FOR COLUMN 13 ( CR PPM )

LIMITS	LOWER -	UPPER	FREQ	FREQ CUM	PERCENT	FREQ	FREQ CUM	PERCENT
3.8E 00	-	5.6E 00	0	0	0.0	0.0	0.0	0.0
5.6E 00	-	8.3E 00	1	1	0.08	0.08	0.08	0.08
8.3E 00	-	1.2E 01	83	84	6.54	6.54	6.54	6.54
1.2E 01	-	1.8E 01	91	175	7.17	7.17	13.78	13.78
1.8E 01	-	2.6E 01	74	249	5.83	5.83	19.61	19.61
2.6E 01	-	3.8E 01	172	421	13.54	13.54	33.15	33.15
3.8E 01	-	5.6E 01	87	508	6.85	6.85	40.00	40.00
5.6E 01	-	8.3E 01	121	629	9.53	9.53	49.53	49.53
8.3E 01	-	1.2E 02	92	721	7.24	7.24	56.77	56.77
1.2E 02	-	1.8E 02	357	1078	28.11	28.11	84.88	84.88
1.8E 02	-	2.6E 02	32	1110	2.52	2.52	87.40	87.40
2.6E 02	-	3.8E 02	59	1169	4.65	4.65	92.05	92.05
3.8E 02	-	5.6E 02	9	1178	0.71	0.71	92.76	92.76
5.6E 02	-	8.3E 02	13	1191	1.02	1.02	93.78	93.78

HISTOGRAM FOR COLUMN 13 ( CR PPM )



115

N	L	H	B	T	G
1	78	0	0	0	0
0.08	6.14				

MAXIMUM = 7.00000E 02

MINIMUM = 7.00000E 00

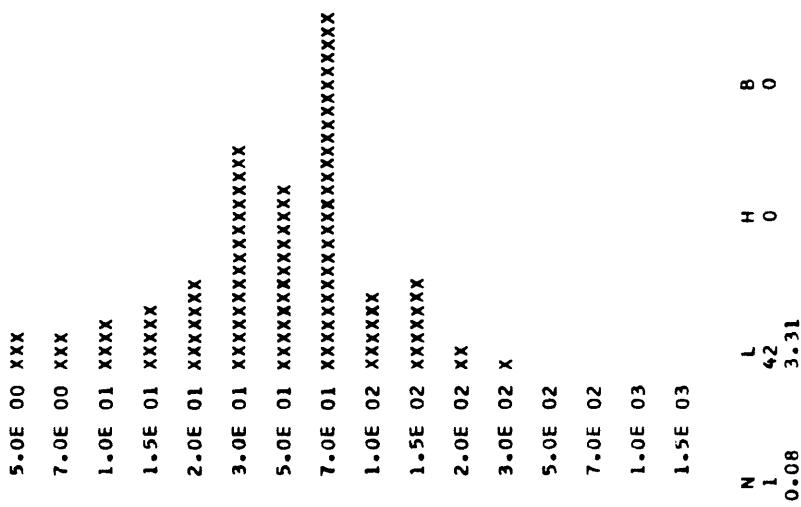
GEOMETRIC MEAN = 6.43651E 01

GEOMETRIC DEVIATION = 2.79935E 00

FREQUENCY TABLE FOR COLUMN 14 ( CU PPM )

LIMITS	LOWER - UPPER	FREQ	FREQ CUM	PERCENT	FREQ	FREQ CUM	PERCENT
3.8E 00 -	5.6E 00	38	38	2.99	2.99	2.99	2.99
5.6E 00 -	8.3E 00	32	70	2.52	5.51	5.51	5.51
8.3E 00 -	1.2E 01	51	121	4.02	9.53	9.53	9.53
1.2E 01 -	1.8E 01	58	179	4.57	14.09	14.09	14.09
1.8E 01 -	2.6E 01	85	264	6.69	20.79	20.79	20.79
2.6E 01 -	3.8E 01	216	480	17.01	37.80	37.80	37.80
3.8E 01 -	5.6E 01	184	664	14.49	52.28	52.28	52.28
5.6E 01 -	8.3E 01	346	1010	27.24	79.53	79.53	79.53
8.3E 01 -	1.2E 02	78	1088	6.14	85.67	85.67	85.67
1.2E 02 -	1.8E 02	87	1175	6.85	92.52	92.52	92.52
1.8E 02 -	2.6E 02	28	1203	2.20	94.72	94.72	94.72
2.6E 02 -	3.8E 02	18	1221	1.42	96.14	96.14	96.14
3.8E 02 -	5.6E 02	3	1224	0.24	96.38	96.38	96.38
5.6E 02 -	8.3E 02	2	1226	0.16	96.54	96.54	96.54
8.3E 02 -	1.2E 03	0	1226	0.0	96.54	96.54	96.54
1.2E 03 -	1.8E 03	1	1227	0.08	96.61	96.61	96.61

HISTOGRAM FOR COLUMN 14 ( CU PPM )



MAXIMUM = 1.50000E 03  
 MINIMUM = 5.00000E 00  
 GEOMETRIC MEAN = 4.46768E 01  
 GEOMETRIC DEVIATION = 2.455629E 00  
  
 ANALYTICAL  
 VALUES  
 1227  
 0.0  
 0.0

## FREQUENCY TABLE FOR COLUMN 15 ( LA PPM )

LOWER -	UPPER	FREQ	FREQ	PERCENT
		CUM	FREQ CUM	FREQ CUM
1.0E 01	- 2.0E 01	244	244	19.21
2.0E 01	- 3.0E 01	109	353	8.58
3.0E 01	- 4.0E 01	38	391	2.99
4.0E 01	- 5.0E 01	26	417	2.05
5.0E 01	- 6.0E 01	15	432	1.18
6.0E 01	- 7.0E 01	17	449	1.34
7.0E 01	- 8.0E 01	1	450	0.08
8.0E 01	- 9.0E 01	4	454	0.31
9.0E 01	- 1.0E 02			35.75

## HISTOGRAM FOR COLUMN 15 ( LA PPM )

2.0E 01 XXXXXXXXXXXXXXXXXX

3.0E 01 XXXXXXXXXX

5.0E 01 XXX

7.0E 01 XX

1.0E 02 X

1.5E 02 X

2.0E 02

3.0E 02

N	L	H	B	T	G	ANALYTICAL VALUES
354	462	0	0	0	0	454
27.87	36.38					

MAXIMUM = 3.00000E 02

MINIMUM = 2.00000E 01

GEOMETRIC MEAN = 2.99339E 01

GEOMETRIC DEVIATION = 1.80993E 00

FREQUENCY TABLE FOR COLUMN - 16 ( MO PPM )

LIMITS	LOWER - UPPER	FREQ	FREQ	PERCENT	PERCENT
		CUM	FREQ	FREQ CUM	FREQ CUM
3.8E 00 -	5.6E 00	88	88	6.93	6.93
5.6E 00 -	8.3E 00	42	130	3.31	10.24
8.3E 00 -	1.2E 01	19	149	1.50	11.73
1.2E 01 -	1.8E 01	17	166	1.34	13.07
1.8E 01 -	2.6E 01	4	170	0.31	13.39
2.6E 01 -	3.8E 01	3	173	0.24	13.62
3.8E 01 -	5.6E 01	7	180	0.55	14.17
5.6E 01 -	8.3E 01	4	184	0.31	14.49

HISTOGRAM FOR COLUMN 16 ( MO PPM )

5.0E 00 XXXXXXXX

7.0E 00 XXX

1.0E 01 X

1.5E 01 X

2.0E 01

3.0E 01

5.0E 01 X

7.0E 01

N	L	H	B	T	G
198	888	0	0	0	0
15.59	69.92			0.0	0.0

MAXIMUM = 7.00000E 01

MINIMUM = 5.00000E 00

GEOMETRIC MEAN = 7.87441E 00

GEOMETRIC DEVIATION = 1.92700E 00

ANALYTICAL  
VALUES

184

## FREQUENCY TABLE FOR COLUMN 17 ( NB PPM )

LIMITS LOWER - UPPER	FREQ	FREQ CUM	PERCENT FREQ	PERCENT FREQ CUM
8.3E 00 - 1.2E 01	878	878	69.13	69.13
1.2E 01 - 1.8E 01	133	1011	10.47	79.61
1.8E 01 - 2.6E 01	15	1026	1.18	80.79
2.6E 01 - 3.8E 01	6	1032	0.47	81.26

## HISTOGRAM FOR COLUMN 17 ( NB PPM )

1.0E 01 XXXXXXXXXXXXXXXXXXXXXXXXX

1.5E 01 XXXXXXXXXX

2.0E 01 X

3.0E 01

N	L	H	B	T	G VALUES
0	238	0	0	0	0.0

MAXIMUM = 3.00000E 01

MINIMUM = 1.00000E 01

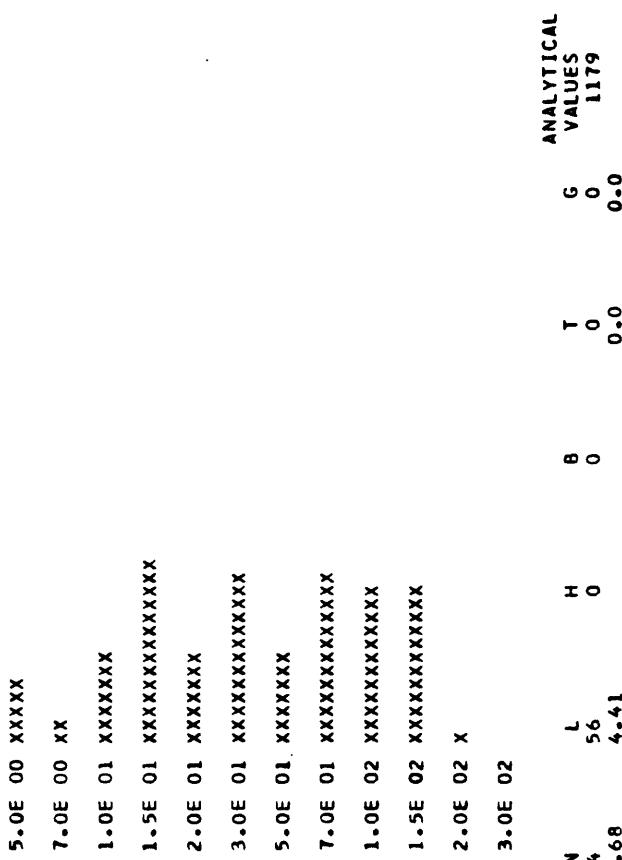
GEOMETRIC MEAN = 1.07073E 01

GEOMETRIC DEVIATION = 1.19380E 00

## FREQUENCY TABLE FOR COLUMN 18 ( NI PPM )

LIMITS	LOWER - UPPER	FREQ	FREQ CUM	PERCENT	FREQ	FREQ CUM	PERCENT
3.8E 00 -	5.6E 00	64	64	5.04	5.04	5.04	5.04
5.6E 00 -	8.3E 00	31	95	2.44	7.49		
8.3E 00 -	1.2E 01	87	182	6.86	14.34		
1.2E 01 -	1.8E 01	179	361	14.11	28.45		
1.8E 01 -	2.6E 01	83	444	6.54	34.99		
2.6E 01 -	3.8E 01	161	605	12.69	47.68		
3.8E 01 -	5.6E 01	83	688	6.54	54.22		
5.6E 01 -	8.3E 01	170	858	13.40	67.61		
8.3E 01 -	1.2E 02	148	1006	11.66	79.28		
1.2E 02 -	1.8E 02	157	1163	12.37	91.65		
1.8E 02 -	2.6E 02	14	1177	1.10	92.75		
2.6E 02 -	3.8E 02	2	1179	0.16	92.91		

## HISTOGRAM FOR COLUMN 18 ( NI PPM )



120

ANALYTICAL  
VALUES

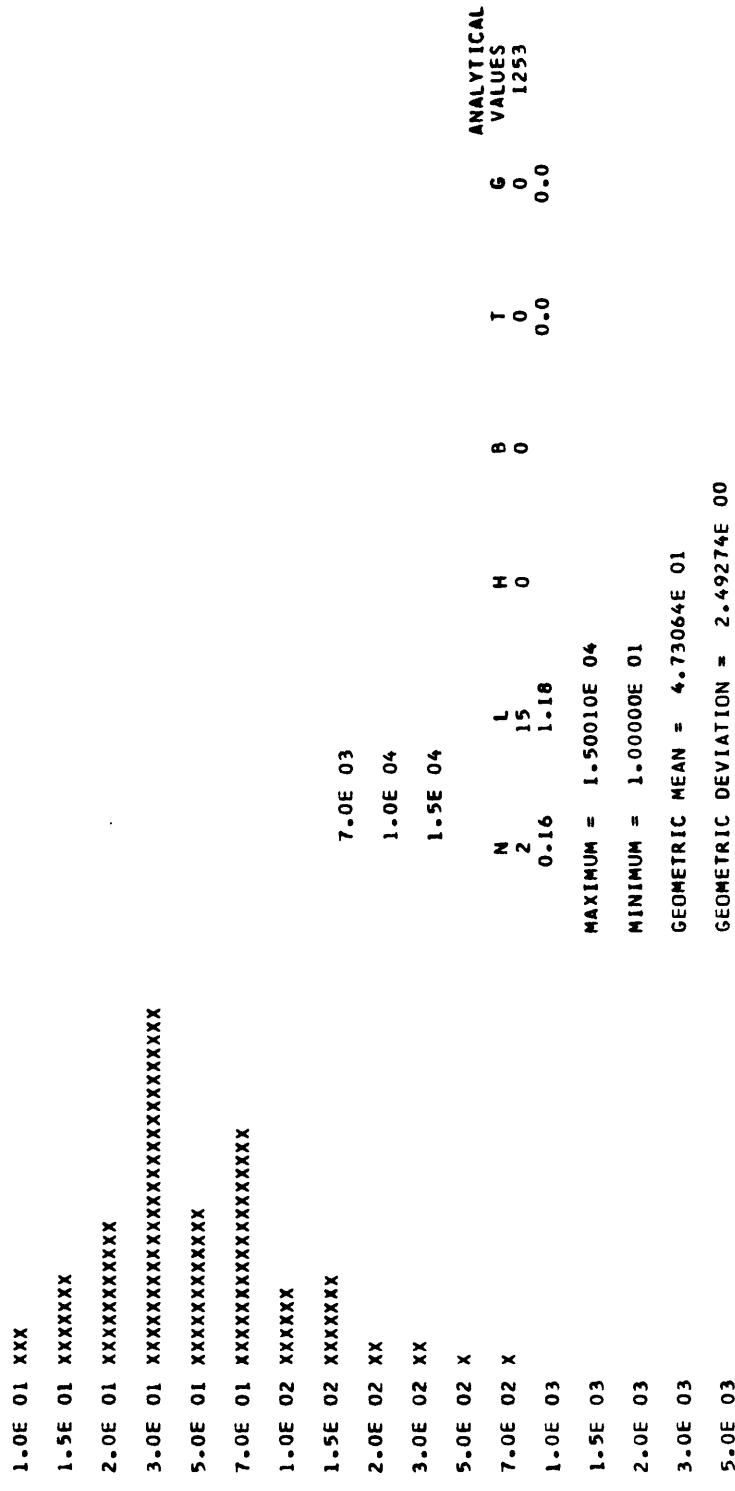
N	L	H	B	T	G
34	56	0	0	0	0
2.68	4.41				1179

MAXIMUM = 3.00000E 02  
MINIMUM = 5.00000E 00  
GEOMETRIC MEAN = 3.66213E 01  
GEOMETRIC DEVIATION = 2.80837E 00

FREQUENCY TABLE FOR COLUMN 19 ( PB PPM )

LIMITS	LOWER -	UPPER	FREQ	FREQ CUM	PERCENT	FREQ	FREQ CUM	PERCENT
8.3E 00	-	1.2E 01	44	44	3.46	3.46	3.46	3.46
1.2E 01	-	1.8E 01	84	128	6.61	10.08	10.08	10.08
1.8E 01	-	2.6E 01	141	269	11.10	21.18	21.18	21.18
2.6E 01	-	3.8E 01	347	616	27.32	48.50	48.50	48.50
3.8E 01	-	5.6E 01	154	770	12.13	60.63	60.63	60.63
5.6E 01	-	8.3E 01	226	996	17.80	78.43	78.43	78.43
8.3E 01	-	1.2E 02	81	1077	6.38	84.80	84.80	84.80
1.2E 02	-	1.8E 02	93	1170	7.32	92.13	92.13	92.13
1.8E 02	-	2.6E 02	22	1192	1.73	93.86	93.86	93.86
2.6E 02	-	3.8E 02	29	1221	2.28	96.14	96.14	96.14
3.8E 02	-	5.6E 02	11	1232	0.87	97.01	97.01	97.01
5.6E 02	-	8.3E 02	10	1242	0.79	97.80	97.80	97.80
8.3E 02	-	1.2E 03	6	1248	0.47	98.27	98.27	98.27
1.2E 03	-	1.8E 03	2	1250	0.16	98.43	98.43	98.43
1.8E 03	-	2.6E 03	0	1250	0.0	98.43	98.43	98.43
2.6E 03	-	3.8E 03	0	1250	0.0	98.43	98.43	98.43
3.8E 03	-	5.6E 03	0	1250	0.0	98.43	98.43	98.43
5.6E 03	-	8.3E 03	1	1251	0.08	98.50	98.50	98.50
8.3E 03	-	1.2E 04	1	1252	0.08	98.58	98.58	98.58
1.2E 04	-	1.8E 04	1	1253	0.08	98.66	98.66	98.66

HISTOGRAM FOR COLUMN 19 ( PB PPM )



## FREQUENCY TABLE FOR COLUMN 20 ( SB PPM )

LIMITS	LOWER -	UPPER	FREQ	FREQ	PERCENT	FREQ	PERCENT
			CUM	CUM	FREQ	CUM	FREQ
8.3E 01 -	1.2E 02	1.8E 02	1	1	0.08	0.08	0.08
1.2E 02 -	1.8E 02	2	3	3	0.16	0.24	0.24

## HISTOGRAM FOR COLUMN 20 ( SB PPM )

N	L	H	B	T	G	ANALYTICAL
98.03	1.73	2.2	0	0	0	VALUES
			0.0	0.0	0.0	3

MAXIMUM = 1.50000E 02

MINIMUM = 1.00000E 02

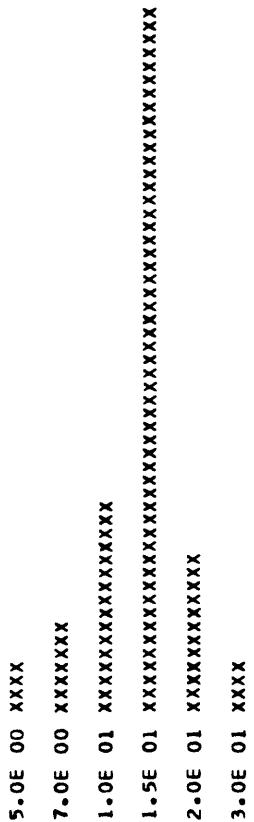
GEOMETRIC MEAN = 1.31037E 02

GEOMETRIC DEVIATION = 1.26375E 00

## FREQUENCY TABLE FOR COLUMN 21 ( SC PPM )

LIMITS LOWER - UPPER	FREQ	FREQ CUM	PERCENT FREQ	PERCENT FREQ CUM
3.8E 00 - 5.6E 00	50	50	3.94	3.94
5.6E 00 - 8.3E 00	88	138	6.93	10.87
8.3E 00 - 1.2E 01	204	342	16.06	26.93
1.2E 01 - 1.8E 01	667	1009	52.52	79.45
1.8E 01 - 2.6E 01	156	1165	12.28	91.73
2.6E 01 - 3.8E 01	50	1215	3.94	95.67

## HISTOGRAM FOR COLUMN 21 ( SC PPM )



N	L	H	B	T	G	ANALYTICAL VALUES
1.6	39	0	0	0	0	1215
1.26	3.07			0.0	0.0	

MAXIMUM = 3.00000E 01

MINIMUM = 5.00000E 00

GEOMETRIC MEAN = 1.35288E 01

GEOMETRIC DEVIATION = 1.45319E 00

FREQUENCY TABLE FOR COLUMN 22 ( SN PPM )

LIMITS LOWER - UPPER	FREQ	FREQ	PERCENT FREQ CUM	PERCENT FREQ CUM
8.3E 00 -	1.2E 01	93	93	7.33
1.2E 01 -	1.8E 01	88	181	6.93
1.8E 01 -	2.6E 01	17	198	1.34
2.6E 01 -	3.8E 01	29	227	2.29
3.8E 01 -	5.6E 01	3	230	0.24
5.6E 01 -	8.3E 01	5	235	0.39
8.3E 01 -	1.2E 02	2	237	0.16
1.2E 02 -	1.8E 02	1	238	0.08
1.8E 02 -	2.6E 02	3	241	0.24
2.6E 02 -	3.8E 02	2	243	0.16
3.8E 02 -	5.6E 02	1	244	0.08
5.6E 02 -	8.3E 02	0	244	0.0
8.3E 02 -	1.2E 03	1	245	0.08

HISTOGRAM FOR COLUMN 22 ( SN PPM )



124

N	L	H	B	T	G
760	264	0	0	0	0
59.89	20.80				

MAXIMUM = 1.00000E 03

MINIMUM = 1.00000E 01

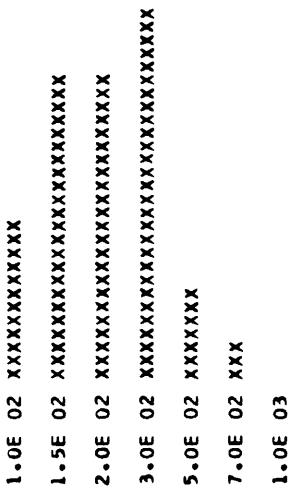
GEOMETRIC MEAN = 1.66894E 01

GEOMETRIC DEVIATION = 2.04313E 00

## FREQUENCY TABLE FOR COLUMN 23 ( SR PPM )

LIMITS LOWER - UPPER	FREQ	FREQ	PERCENT FREQ CUM
8.3E 01 - 1.2E 02	147	147	11.57
1.2E 02 - 1.8E 02	291	438	22.91
1.8E 02 - 2.6E 02	289	727	22.76
2.6E 02 - 3.8E 02	353	1080	27.80
3.8E 02 - 5.6E 02	84	1164	6.61
5.6E 02 - 8.3E 02	38	1202	2.99
8.3E 02 -	3	1205	0.24
			94.88

## HISTOGRAM FOR COLUMN 23 ( SR PPM )



ANALYTICAL  
N L H B T G VALUES  
14 51 0 0 0 0 0.0  
1.10 4.02 0.02 0.0 0.0 0.0 1205

MAXIMUM = 1.00000E 03

MINIMUM = 1.00000E 02

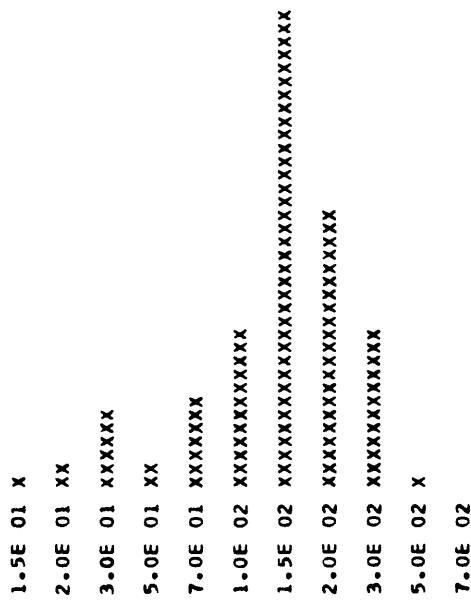
GEOMETRIC MEAN = 2.14933E 02

GEOMETRIC DEVIATION = 1.62043E 00

## FREQUENCY TABLE FOR COLUMN 24 ( V PPM )

LIMITS LOWER - UPPER	FREQ	FREQ CUM	PERCENT FREQ CUM
8.3E 00 - 1.2E 01	0	0	0.0 0.0
1.2E 01 - 1.8E 01	15	15	1.18 1.18
1.8E 01 - 2.6E 01	30	45	2.36 3.54
2.6E 01 - 3.8E 01	71	116	5.59 9.13
3.8E 01 - 5.6E 01	31	147	2.44 11.57
5.6E 01 - 8.3E 01	87	234	6.85 18.43
8.3E 01 - 1.2E 02	151	385	11.89 30.31
1.2E 02 - 1.8E 02	452	837	35.59 65.91
1.8E 02 - 2.6E 02	272	1109	21.42 87.32
2.6E 02 - 3.8E 02	148	1257	11.65 98.98
3.8E 02 - 5.6E 02	11	1268	0.87 99.84
5.6E 02 - 8.3E 02	2	1270	0.16 100.00

## HISTOGRAM FOR COLUMN 24 ( V PPM )



ANALYTICAL VALUES  
 N L H B T G  
 0 0 0 0 0 0  
 0.0 0.0 0.0 0.0 0.0 0.0

MAXIMUM = 7.00000E 02

MINIMUM = 1.50000E 01

GEOMETRIC MEAN = 1.30812E 02

GEOMETRIC DEVIATION = 1.97345E 00

## FREQUENCY TABLE FOR COLUMN 25 ( W PPM )

LIMITS	LOWER -	UPPER	FREQ	FREQ	PERCENT	PERCENT
			CUM	FREQ	FREQ CUM	FREQ CUM
3.8E 01 -	5.6E 01		5	5	0.39	0.39
5.6E 01 -	8.3E 01		1	6	0.08	0.47

## HISTOGRAM FOR COLUMN 25 ( W PPM )

N	L	H	FREQ	FREQ	PERCENT	PERCENT
			CUM	FREQ	FREQ CUM	FREQ CUM
1252	1.2	0	0	0	0	0
98.58	0.94		0.0	0.0	0.0	0.0

MAXIMUM = 7.00000E 01

MINIMUM = 5.00000E 01

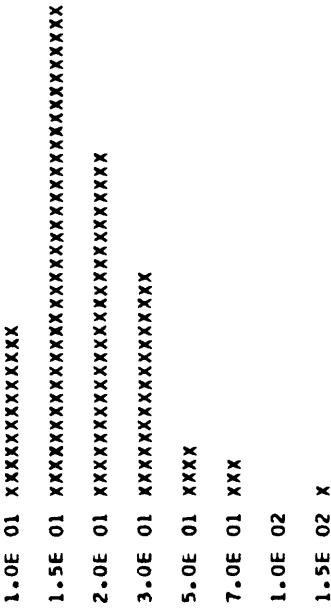
GEOMETRIC MEAN = 5.28839E 01

GEOMETRIC DEVIATION = 1.14721E 00

## FREQUENCY TABLE FOR COLUMN 26 ( Y PPM )

LOWER	UPPER	FREQ	FREQ	PERCENT	PERCENT
LIMITS		CUM	FREQ	FREQ	FREQ CUM
8.3E 00	-	1.2E 01	166	13.07	13.07
1.2E 01	-	1.8E 01	470	37.01	50.08
1.8E 01	-	2.6E 01	327	963	75.83
2.6E 01	-	3.8E 01	210	1173	92.36
3.8E 01	-	5.6E 01	49	1222	96.22
5.6E 01	-	8.3E 01	38	1260	99.21
8.3E 01	-	1.2E 02	3	1263	99.45
1.2E 02	-	1.8E 02	7	1270	100.00

## HISTOGRAM FOR COLUMN 26 ( Y PPM )



N	L	H	B	T	G	ANALYTICAL VALUES
0	0	0	0	0	0	1270
0.0	0.0	0.0	0.0	0.0	0.0	0.0

MAXIMUM = 1.50000E 02

MINIMUM = 1.00000E 01

GEOMETRIC MEAN = 1.91690E 01

GEOMETRIC DEVIATION = 1.61089E 00

## FREQUENCY TABLE FOR COLUMN 27 ( ZN PPM )

LIMITS	LOWER -	UPPER	FREQ	FREQ	PERCENT	FREQ	PERCENT
			CUM		FREQ CUM		FREQ CUM
1.8E 02	-	2.6E 02	223	223	17.56	17.56	17.56
2.6E 02	-	3.8E 02	144	367	11.34	28.90	
3.8E 02	-	5.6E 02	22	389	1.73	30.63	
5.6E 02	-	8.3E 02	34	423	2.68	33.31	
8.3E 02	-	1.2E 03	9	432	0.71	34.02	
1.2E 03	-	1.8E 03	7	439	0.55	34.57	
1.8E 03	-	2.6E 03	2	441	0.16	34.72	
2.6E 03	-	3.8E 03	4	445	0.31	35.04	

## HISTOGRAM FOR COLUMN 27 ( ZN PPM )

2.0E 02 XXXXXXXXXXXXXXXXXXXXXXX

3.0E 02 XXXXXXXXXX

5.0E 02 XX

7.0E 02 XXX

1.0E 03 X

1.5E 03 X

2.0E 03

3.0E 03

ANALYTICAL  
VALUES  
445

N	L	H	B	T	G
155	670	0	0	0	0
12.20	52.76				

MAXIMUM = 3.00000E 03

MINIMUM = 2.00000E 02

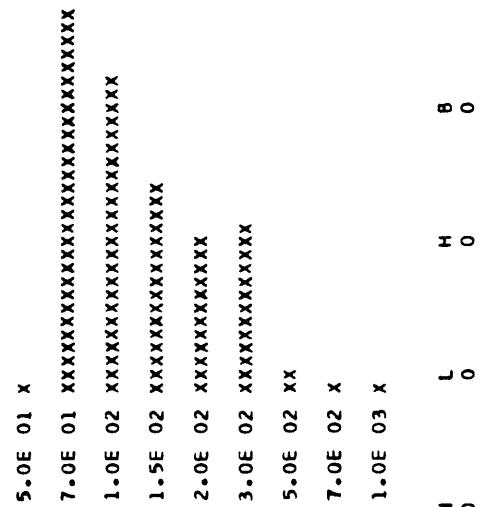
GEOMETRIC MEAN = 2.89856E 02

GEOMETRIC DEVIATION = 1.70404E 00

FREQUENCY TABLE FOR COLUMN 28 ( LR PPM )

LIMITS LOWER - UPPER	FREQ	FREQ	PERCENT
	CUM	FREQ	PERCENT FREQ CUM
8.3E 00 - 1.2E 01	0	0	0.0 0.0
1.2E 01 - 1.8E 01	0	0	0.0 0.0
1.8E 01 - 2.6E 01	1	1	0.08 0.08
2.6E 01 - 3.8E 01	4	5	0.31 0.39
3.8E 01 - 5.6E 01	8	13	0.63 1.02
5.6E 01 - 8.3E 01	374	387	29.45 30.47
8.3E 01 - 1.2E 02	305	692	24.02 54.49
1.2E 02 - 1.8E 02	208	900	16.38 70.87
1.8E 02 - 2.6E 02	158	1058	12.44 83.31
2.6E 02 - 3.8E 02	159	1217	12.52 95.83
3.8E 02 - 5.6E 02	30	1247	2.36 98.19
5.6E 02 - 8.3E 02	15	1262	1.16 99.37
8.3E 02 - 1.2E 03	8	1270	0.63 100.00

HISTOGRAM FOR COLUMN 28 ( LR PPM )

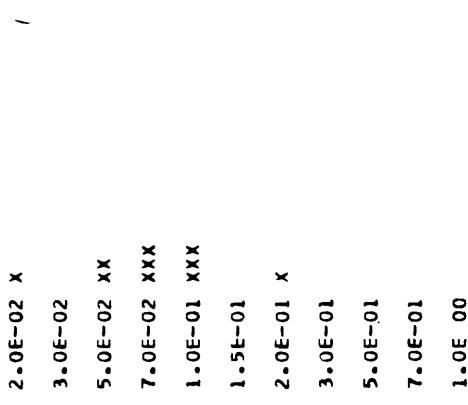


ANALYTICAL  
N L H T G VALUES  
0 0 0 0 0 0  
0.0 0.0 0.0 0.0 0.0 0.0  
MAXIMUM = 1.00000E 03  
MINIMUM = 2.00000E 01  
GEOMETRIC MEAN = 1.28542E 02  
GEOMETRIC DEVIATION = 1.02213E 00

## FREQUENCY TABLE FOR COLUMN 29 ( AU PPM )

LOWER LIMITS	UPPER	FREQ	FREQ	PERCENT
		CUM	FREQ	FREQ CUM
1.8E-02	- 2.6E-02	15	15	1.18
2.6E-02	- 3.8E-02	0	15	1.18
3.8E-02	- 5.6E-02	28	43	2.20
5.6E-02	- 8.3E-02	35	78	2.76
8.3E-02	- 1.2E-01	33	111	2.60
1.2E-01	- 1.8E-01	1	112	0.08
1.8E-01	- 2.6E-01	14	126	1.10
2.6E-01	- 3.8E-01	2	128	0.16
3.8E-01	- 5.6E-01	6	134	0.47
5.6E-01	- 8.3E-01	3	137	0.24
8.3E-01	- 1.2E 00	3	140	0.24
				11.02

## HISTOGRAM FOR COLUMN 29 ( AU PPM )



/31

N	L	H	B	T	G	ANALYTICAL VALUES
0	1130	0	0	0	0	140

MAXIMUM = 1.10000E 00

MINIMUM = 2.00000E-02

GEOMETRIC MEAN = 8.111079E-02

GEOMETRIC DEVIATION = 2.46025E 00

ELEMENT	N	L	H	B	T	G	ANALYTICAL VALUES
FE PCT	0	0	0	0	0	0	1270
MG PCT	0	0	0	0	0	0	1270
CA PCT	0	2	0	0	0	0	1268
FI PCT	0	0	0	0	0	0	1270
MN PPM	0	0	0	0	0	0	1270
AG PPM	261	543	103	0	0	0	466
AS PPM	1057	141	0	0	0	0	110
B PPM	180	0	0	0	0	0	949
BA PPM	0	1	0	0	0	0	1269
BE PPM	73	264	0	0	0	0	933
BI PPM	1240	12	0	0	0	0	18
CO PPM	64	86	0	0	0	0	1120
CR PPM	1	78	0	0	0	0	1191
CU PPM	354	462	0	0	0	0	454
LA PPM	MD PPM	198	888	0	0	0	184
SC PPM	NB PPM	0	238	0	0	0	1032
SN PPM	34	56	0	0	0	0	1179
SR PPM	2	15	0	0	0	0	1253
PB PPM	1244	22	0	0	0	0	3
SB PPM	SC PPM	16	39	0	0	0	1215
SN PPM	SN PPM	760	264	0	0	0	245
SR PPM	SR PPM	14	51	0	0	0	1205
V PPM	V PPM	0	0	0	0	0	1270
W PPM	W PPM	1252	12	0	0	0	6
Y PPM	Y PPM	0	0	0	0	0	1270
ZN PPM	ZN PPM	155	670	0	0	0	445
ZR PPM	ZR PPM	0	0	0	0	0	1270
AU PPM	AU PPM	0	1130	0	0	0	140

ELEMENT	MEAN	GEOMETRIC DEVIATION	REMARKS
FE PCT	6.151548	1.90	1270 SAMPLES AND 1270 ANALYTICAL VALUES.
MG PCT	1.268431	1.88	1270 SAMPLES AND 1270 ANALYTICAL VALUES.
CA PCT	0.98104	2.00	2 NOT DETECTED, LESS THAN, OR TRACE VALUES.
FI PCT	0.443667	1.64	1270 SAMPLES AND 1270 ANALYTICAL VALUES.
MN PPM	999.328369	1.71	1270 SAMPLES AND 1270 ANALYTICAL VALUES.
AG PPM	0.265884	3.72	804 NOT DETECTED, LESS THAN, OR TRACE VALUES.
AS PPM	*****	*****	1160 NOT DETECTED, LESS THAN, OR TRACE VALUES.
B PPM	21.629120	4.02	321 NOT DETECTED, LESS THAN, OR TRACE VALUES.
BA PPM	571.305664	1.69	1 NOT DETECTED, LESS THAN, OR TRACE VALUES.
BE PPM	1.190760	1.82	337 NOT DETECTED, LESS THAN, OR TRACE VALUES.
BI PPM	*****	*****	1252 NOT DETECTED, LESS THAN, OR TRACE VALUES.
CO PPM	14.792079	2.48	150 NOT DETECTED, LESS THAN, OR TRACE VALUES.
CR PPM	52.446023	3.60	79 NOT DETECTED, LESS THAN, OR TRACE VALUES.
CU PPM	40.63280	2.77	43 NOT DETECTED, LESS THAN, OR TRACE VALUES.
LA PPM	*****	*****	816 NOT DETECTED, LESS THAN, OR TRACE VALUES.
MO PPM	0.778240	4.26	1086 NOT DETECTED, LESS THAN, OR TRACE VALUES.
NB PPM	9.959774	1.25	238 NOT DETECTED, LESS THAN, OR TRACE VALUES.
NJ PPM	30.104691	3.42	90 NOT DETECTED, LESS THAN, OR TRACE VALUES.
PB PPM	45.983582	2.56	17 NOT DETECTED, LESS THAN, OR TRACE VALUES.
SB PPM	*****	*****	1266 NOT DETECTED, LESS THAN, OR TRACE VALUES.
SC PPM	12.727986	1.59	55 NOT DETECTED, LESS THAN, OR TRACE VALUES.
SN PPM	*****	*****	1024 NOT DETECTED, LESS THAN, OR TRACE VALUES.
SR PPM	202.323303	1.71	65 NOT DETECTED, LESS THAN, OR TRACE VALUES.

			1270 SAMPLES AND 1270 ANALYTICAL VALUES.	6 REPORTED VALUES. NO COMPUTATIONS.
V PPM	130.811249	1.97	1264 NOT DETECTED, LESS THAN, OR TRACE VALUES.	
W PPM	*****	*****	1270 SAMPLES AND 1270 ANALYTICAL VALUES.	
Y PPM	19.168930	1.61	1270 NOT DETECTED, LESS THAN, OR TRACE VALUES.	
LN PPM	*****	*****	825 NOT DETECTED, LESS THAN, OR TRACE VALUES.	445 REPORTED VALUES. NO COMPUTATIONS.
ZR PPM	128.541489	1.82	1270 SAMPLES AND 1270 ANALYTICAL VALUES.	
AU PPM	0.000483	18.73	1130 NOT DETECTED, LESS THAN, OR TRACE VALUES.	140 REPORTED VALUES.

Table 2.--Analyses of unmineralized granitic rock samples

(Map number refers to locality shown on plate 4.)

MAP SAMPLE NO.	FE PCT	MG PCT	CA PCT	Ti PCT	MN PPM	AG PPM	AS PPM	B PPM	BA PPM	BE PPM
G 1 AKI757	3.0000	1.0000	2.0000	0.3000	700.0000	0.0	0.0	N	1500.0000	2.0000
G 2 AKI760	3.0000	3.0000	3.0000	0.5000	700.0000	0.0	0.0	N	150.0000	5.0000
G 3 AKI762	2.0000	2.0000	1.5000	0.3000	700.0000	0.0	0.0	N	100.0000	3.0000
G 4 AKI756	3.0000	1.5000	2.0000	0.2000	700.0000	0.0	0.0	N	150.0000	3.0000
G 5 AKI764	2.0000	1.5000	1.5000	0.3000	700.0000	0.0	0.0	N	20.0000	2.0000
G 6 AKI763	2.0000	1.5000	1.5000	0.3000	500.0000	0.0	0.0	N	700.0000	1.5000
G 7 AKI949	3.0000	1.0000	3.0000	0.3000	700.0000	0.0	0.0	N	1000.0000	0.0
G 8 AKI950	3.0000	1.0000	3.0000	0.3000	1000.0000	0.0	0.0	N	1000.0000	0.0
G 9 AKI951	3.0000	1.0000	2.0000	0.3000	700.0000	0.0	0.0	N	700.0000	0.0
G 10 AKI952	3.0000	1.0000	3.0000	0.3000	1000.0000	0.0	0.0	N	1000.0000	0.0
G 11 AKI947	3.0000	1.0000	3.0000	0.3000	700.0000	0.0	0.0	N	1000.0000	0.0
G 12 AKI948	3.0000	1.0000	3.0000	0.3000	700.0000	0.0	0.0	N	1000.0000	1.5000
G 13 AKI818	1.0000	0.0700	0.1000	0.0700	100.0000	0.0	0.0	N	200.0000	0.0
G 14 AKI509	1.5000	0.0500	0.3000	0.0700	100.0000	0.0	0.0	N	700.0000	0.0
G 15 AKI737	1.5000	1.0000	2.0000	0.2000	500.0000	0.0	0.0	N	10.0000	1.5000
G 16 AKI989	0.7000	0.0200	0.7000	0.0500	150.0000	0.0	0.0	N	10.0000	5.0000
G 17 AKI991	1.0000	0.0200	0.7000	0.0700	200.0000	0.0	0.0	N	200.0000	5.0000
G 18 AKI992	2.0000	0.2000	1.0000	0.1500	500.0000	0.0	0.0	N	1500.0000	5.0000
G 19 AKI994	0.1500	0.0300	0.1500	0.1000	300.0000	0.0	0.0	N	100.0000	2.0000
G 20 AKI993	0.7000	0.0500	0.7000	0.1000	150.0000	0.0	0.0	N	300.0000	5.0000
G 21 AKI960	3.0000	0.5000	2.0000	0.2000	700.0000	0.0	0.0	N	1500.0000	3.0000
G 22 AKI806	1.0000	0.2000	1.0000	0.0700	500.0000	0.0	0.0	N	1000.0000	2.0000
G 23 AKI813	0.7000	0.1000	0.5000	0.0700	200.0000	0.0	0.0	N	0.0	5.0000
G 24 AKI958	1.5000	0.0	1.5000	0.1000	300.0000	0.0	0.0	N	1500.0000	1.5000
G 25 AKI957	1.0000	0.1500	0.7000	0.1000	200.0000	0.0	0.0	N	1000.0000	3.0000
G 26 AKA053	2.0000	0.3000	1.0000	0.1500	500.0000	0.0	0.0	N	1500.0000	2.0000
G 27 AKI766	1.0000	0.1500	0.7000	0.1000	300.0000	0.0	0.0	N	1500.0000	2.0000
G 28 AKI815	0.7000	0.1500	1.0000	0.1000	150.0000	0.0	0.0	N	1500.0000	2.0000
G 29 AKI767	0.7000	0.0700	0.5000	0.0500	150.0000	0.0	0.0	N	500.0000	1.5000
G 30 AKI768	1.5000	0.2000	1.0000	0.1000	300.0000	0.0	0.0	N	1500.0000	2.0000
G 31 AKI798	0.7000	0.0700	0.7000	0.0700	300.0000	0.0	0.0	N	1500.0000	0.0
G 32 AKI736	2.0000	0.5000	1.5000	0.3000	500.0000	0.0	0.0	N	10.0000	5.0000
G 33 AKI814	2.0000	0.5000	2.0000	0.2000	500.0000	0.0	0.0	N	1000.0000	2.0000
G 34 AKI735	2.0000	0.7000	2.0000	0.2000	500.0000	0.0	0.0	N	30.0000	3.0000
G 35 AKI955	7.0000	2.0000	5.0000	0.7000	1000.0000	0.0	0.0	N	0.0	0.0
G 36 AKI816	3.0000	1.0000	3.0000	0.5000	700.0000	0.0	0.0	N	10.0000	5.0000
G 37 AKI807	5.0000	1.5000	5.0000	0.5000	1500.0000	0.0	0.0	N	1500.0000	0.0
G 38 AKI963	5.0000	2.0000	1.0000	0.5000	700.0000	0.0	0.0	N	0.0	2.0000
G 39 AKI714	2.0000	0.7000	1.5000	0.3000	700.0000	0.0	0.0	N	1500.0000	3.0000
G 40 AKI817	7.0000	3.0000	5.0000	0.7000	1500.0000	0.0	0.0	N	1000.0000	0.0
G 41 AKI761	5.0000	2.0000	7.0000	0.5000	1500.0000	0.0	0.0	N	500.0000	0.0
G 42 AKI819	5.0000	1.5000	3.0000	0.5000	1000.0000	0.0	0.0	N	30.0000	1.5000
G 43 AKI715	5.0000	2.0000	3.0000	0.5000	1000.0000	0.0	0.0	N	2000.0000	0.0
G 44 R68222	5.0000	0.1500	3.0000	0.5000	1000.0000	0.0	0.0	N	700.0000	2.0000
G 45 R68220	5.0000	0.1500	3.0000	0.5000	1000.0000	0.0	0.0	N	1000.0000	1.5000
G 46 AKI501	5.0000	3.0000	3.0000	0.5000	1000.0000	0.0	0.0	N	70.0000	2.0000
G 47 AKI804	7.0000	5.0000	5.0000	0.7000	1500.0000	0.0	0.0	N	1500.0000	0.0
G 48 AKI793	7.0000	5.0000	0.7000	0.7000	1000.0000	0.0	0.0	N	2000.0000	0.0
G 49 AKI778	1.0000	0.1500	0.7000	0.1500	200.0000	0.0	0.0	N	700.0000	3.0000
G 50 AKI777	1.5000	0.3000	1.0000	0.1500	200.0000	0.0	0.0	N	1000.0000	2.0000

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TABLE 2 - P-2

MAP NO.	SAMPLE	P1 PPM	CD PPM	CU PPM	CR PPM	LA PPM	MO PPM	NB PPM	N1 PPM	PB PPM
G 1 AK1757	0.0	0.0	N	10.0000	70.0000	10.0000	50.0000	0.0	10.0000	15.0000
G 2 AK1760	0.0	0.0	N	20.0000	30.0000	70.0000	50.0000	0.0	10.0000	10.0000
G 3 AK1762	0.0	0.0	N	20.0000	10.0000	20.0000	30.0000	0.0	10.0000	50.0000
G 4 AK1756	0.0	0.0	N	7.0000	70.0000	2.0000	30.0000	0.0	10.0000	15.0000
G 5 AK1764	0.0	0.0	N	7.0000	70.0000	7.0000	30.0000	0.0	10.0000	15.0000
G 6 AK1763	0.0	0.0	N	7.0000	30.0000	5.0000	70.0000	0.0	L	20.0000
G 7 AK1949	0.0	0.0	N	10.0000	70.0000	0.0	30.0000	0.0	10.0000	10.0000
G 8 AK1950	0.0	0.0	N	10.0000	50.0000	30.0000	50.0000	0.0	10.0000	15.0000
G 9 AK1951	0.0	0.0	N	10.0000	30.0000	0.0	50.0000	0.0	10.0000	7.0000
G 10 AK1952	0.0	0.0	N	10.0000	70.0000	7.0000	30.0000	0.0	10.0000	10.0000
G 11 AK1947	0.0	0.0	N	10.0000	50.0000	0.0	10.0000	0.0	10.0000	15.0000
G 12 AK1948	0.0	0.0	N	10.0000	70.0000	10.0000	10.0000	0.0	10.0000	20.0000
G 13 AK1818	0.0	0.0	N	10.0000	0.0	L	30.0000	0.0	30.0000	5.0000
G 14 AK1509	0.0	0.0	N	10.0000	10.0000	0.0	N	0.0	L	0.0
G 15 AK1737	0.0	0.0	N	10.0000	0.0	L	0.0	0.0	L	15.0000
G 16 AK1989	0.0	0.0	N	0.0	0.0	L	0.0	0.0	L	0.0
G 17 AK1991	0.0	0.0	N	0.0	0.0	L	0.0	0.0	L	20.0000
G 18 AK1992	0.0	0.0	N	0.0	0.0	L	0.0	0.0	L	15.0000
G 19 AK1994	0.0	0.0	N	0.0	0.0	L	0.0	0.0	L	30.0000
G 20 AK1993	0.0	0.0	N	0.0	0.0	L	0.0	0.0	L	20.0000
G 21 AK1960	0.0	0.0	N	5.0000	7.0000	0.0	30.0000	0.0	10.0000	0.0
G 22 AK1806	0.0	0.0	N	0.0	1.5000	0.0	N	0.0	7.0000	20.0000
G 23 AK1813	0.0	0.0	N	0.0	0.0	L	0.0	0.0	N	20.0000
G 24 AK1958	0.0	0.0	N	0.0	0.0	L	0.0	0.0	N	20.0000
G 25 AK1957	0.0	0.0	N	0.0	0.0	L	0.0	0.0	N	20.0000
G 26 AKA053	0.0	0.0	N	0.0	0.0	L	0.0	0.0	N	10.0000
G 27 AK1766	0.0	0.0	N	0.0	0.0	L	0.0	0.0	N	0.0
G 28 AK1815	0.0	0.0	N	0.0	0.0	L	0.0	0.0	N	5.0000
G 29 AK1767	0.0	0.0	N	0.0	0.0	L	0.0	0.0	N	10.0000
G 30 AK1768	0.0	0.0	N	0.0	0.0	L	0.0	0.0	N	10.0000
G 31 AK1798	0.0	0.0	N	0.0	0.0	N	0.0	0.0	N	30.0000
G 32 AK1736	0.0	0.0	N	0.0	10.0000	0.0	50.0000	0.0	0.0	L
G 33 AK1814	0.0	0.0	N	5.0000	15.0000	0.0	50.0000	0.0	0.0	L
G 34 AK1735	0.0	0.0	N	5.0000	15.0000	0.0	50.0000	0.0	10.0000	7.0000
G 35 AKA955	0.0	0.0	N	20.0000	7.0000	10.0000	30.0000	0.0	10.0000	10.0000
G 36 AK1816	0.0	0.0	N	15.0000	30.0000	5.0000	50.0000	0.0	0.0	L
G 37 AK1807	0.0	0.0	N	20.0000	30.0000	30.0000	0.0	0.0	L	7.0000
G 38 AKA963	0.0	0.0	N	15.0000	20.0000	5.0000	0.0	N	0.0	15.0000
G 39 AK1714	0.0	0.0	N	0.0	0.0	L	0.0	0.0	L	10.0000
G 40 AK1817	0.0	0.0	N	20.0000	100.0000	7.0000	0.0	10.0000	0.0	N
G 41 AK1761	0.0	0.0	N	20.0000	15.0000	50.0000	0.0	0.0	L	10.0000
G 42 AK1819	0.0	0.0	N	15.0000	70.0000	0.0	1	0.0	N	10.0000
G 43 AK1715	0.0	0.0	N	0.0	20.0000	150.0000	15.0000	0.0	10.0000	20.0000
G 44 R68222	0.0	0.0	N	0.0	20.0000	70.0000	30.0000	0.0	10.0000	15.0000
G 45 R68220	0.0	0.0	N	15.0000	20.0000	100.0000	0.0	N	15.0000	30.0000
G 46 AK1501	0.0	0.0	N	20.0000	300.0000	100.0000	30.0000	0.0	10.0000	150.0000
G 47 AK1804	0.0	0.0	N	50.0000	300.0000	70.0000	0.0	15.0000	70.0000	10.0000
G 48 AK1793	0.0	0.0	N	0.0	500.0000	50.0000	50.0000	0.0	10.0000	70.0000
G 49 AK1778	0.0	0.0	N	0.0	0.0	L	0.0	0.0	N	15.0000
G 50 AK1777	0.0	0.0	N	0.0	0.0	L	0.0	0.0	N	10.0000

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TABLE 2 - P. 3

TABLE 2 - P-4

<i>M&amp;P No.</i>	SAMPLE	FE PCT	MG PCT	CA PCT	Tl PCT	Mn PPM	Ag PPM	As PPM	B PPM	BA PPM	BE PPM
6.51	AK1116	2.0000	0.3000	1.5000	0.1500	500.0000	0.0	0.0	N	10.0000	1500.0000
6.52	AK1799	2.0000	1.0000	2.0000	0.3000	500.0000	0.0	0.0	N	0.0	0.0
6.53	AK1794	2.0000	0.5000	1.5000	0.2000	500.0000	0.0	0.0	N	1500.0000	1.5000
6.54	AKA941	3.0000	1.0000	0.2000	0.2000	500.0000	0.0	0.0	N	1000.0000	0.0
6.55	AK1803	2.0000	1.0000	2.0000	0.2000	700.0000	0.0	0.0	N	0.0	1500.0000

GRANDDRIE  
 OF THE  
 STONY RIVER

TABLE 2 - P-5

SAMPLE	BI PPM	CD PPM	CO PPM	CR PPM	CU PPM	LA PPM	MD PPM	NB PPM	NI PPM	PB PPM
G 5 / AK1776	0.0	N	0.0	N	0.0	L	7.0000	0.0	L	30.0000
G 5.2 AK1799	0.0	N	0.0	N	7.0000		30.0000	0.0	N	0.0
G 5.3 AK1794	0.0	N	0.0	N	0.0	L	10.0000	0.0	N	0.0
G 5.4 AKA941	0.0	N	0.0	N	0.0	L	30.0000	0.0	N	0.0
G 5.5 AK1803	0.0	N	0.0	N	10.0000		20.0000	0.0	L	0.0

TABLE 2 - P-6

SAMPLE	SR PPM	SC PPM	SN PPM	SR PPM	V PPM	W PPM	Y PPM	ZN PPM	ZR PPM	AU PPM
651 AKI776	0.0 N	7.0000	0.0 N	200.0000	15.0000	0.0 N	50.0000	0.0 N	200.0000	0.0200L
652 AKI799	0.0 N	10.0000	0.0 L	700.0000	70.0000	0.0 N	20.0000	0.0 N	150.0000	0.0200L
653 AKI794	0.0 N	5.0000	0.0 N	700.0000	15.0000	0.0 N	10.0000	0.0 N	150.0000	0.0200L
654 AKA941	0.0 N	10.0000	0.0 N	500.0000	70.0000	0.0 N	15.0000	0.0 N	150.0000	0.0200L
655 AKI803	0.0 N	10.0000	0.0 N	500.0000	70.0000	0.0 N	20.0000	0.0 N	150.0000	0.0200L

Table 3.—Analyses of mineralized  
apatite and bedrock samples

(Map number refers to locality shown on plate 4)

MAP. NO.	SAMPLE NO.	FE PCT	MG PCT	CA PCT	Tl PCT	MN PPM	AG PPM	AS PPM	B PPM	BA PPM	BE PPM
S 1	AK1723	15.0000	0.0700	2.0000	0.0700	5000.0000	20.0000	0.0	L	30.0000	150.0000
S 2	AK1722	20.0000	0.0	L	0.0300	700.0000	300.0000	10000.0000	15.0000	100.0000	2.0000
S 3	AK1711	1.5000	0.0700	0.7000	0.1500	0.0	N	0.0	L	150.0000	3.0000
4	AKA912	3.0000	0.7000	0.0700	0.3000	70.0000	15.0000	10000.0000	150.0000	300.0000	1.5000
5	AKA910	10.0000	1.5000	0.3000	0.5000	700.0000	15.0000	0.0	N	20.0000	700.0000
6	AKA916	3.0000	1.5000	0.7000	0.3000	300.0000	0.7000	0.0	N	0.0	300.0000
7	AKA559	10.0000	0.7000	0.7000	0.3000	100.0000	300.0000	10000.0000	0.0	L	30.0000
8	AKA560	10.0000	0.7000	0.1500	0.5000	100.0000	300.0000	500.0000	70.0000	200.0000	1.0000
9	AKA567	5.0000	1.0000	0.1500	0.3000	150.0000	150.0000	500.0000	2000.0000	200.0000	1.0000
10	AKA568	15.0000	1.5000	0.3000	0.5000	300.0000	20.0000	7000.0000	2000.0000	300.0000	1.5000
11	AKA584	20.0000	0.7000	0.1500	0.2000	300.0000	70.0000	0.0	L	500.0000	0.0
12	AKA586	20.0000	0.0300	0.0	L	1500.0000	1500.0000	1500.0000	0.0	L	0.0
13	AKA587	15.0000	3.0000	1.5000	0.7000	2000.0000	50.0000	700.0000	10.0000	N	1.0000
14	AKA588	20.0000G	0.7000	1.5000	0.0700	5000.0000G	150.0000	5000.0000	0.0	N	1.0000
15	AKA591	20.0000G	0.7000	0.0700	0.0100	3000.0000	1000.0000	3000.0000	10.0000	0.0	1.0000
16	AKA592	3.0000	0.5000	0.0	L	0.0500	1500.0000	300.0000	1500.0000	0.0	L
17	AK1502	1.5000	0.5000	0.7000	0.1500	1500.0000	3.0000	0.0	N	0.0	0.0
18	AK1505	3.0000	3.0000	0.7000	0.7000	1500.0000	30.0000	1000.0000	1500.0000	500.0000	1.5000
19	AK1504	15.0000	0.3000	0.1500	0.1000	300.0000	100.0000	700.0000	700.0000	150.0000	1.5000
20	AKA006	10.0000	0.0700	0.0	L	0.1500	5000.0000	150.0000	0.0	L	1.0000
21	AKA049	3.0000	0.1000	0.0	L	0.0700	2000.0000	150.0000	0.0	N	200.0000
22	AKA012	3.0000	0.1500	0.0	L	0.0700	1500.0000	70.0000	0.0	N	15.0000
23	AK1827	3.0000	0.0700	0.0	L	0.0700	1000.0000	30.0000	0.0	N	300.0000
24	AKA525	3.0000	0.0100	0.0	L	0.0300	100.0000	15.0000	0.0	N	300.0000
25	AKA527	15.0000	0.20000	0.0	L	0.0700	200.0000	10.0000	300.0000	0.0	L
26	AKA530	1.0000	0.20000	0.0	L	0.1500	200.0000	0.0	N	0.0	1500.0000
27	AKA573	20.0000	0.5000	0.0	L	0.0300	2000.0000	200.0000	100.0000	100.0000	1.50000
28	AKA574	15.0000	1.5000	0.1500	0.3000	1000.0000	100.0000	1000.0000	2000.0000G	500.0000	1.50000
29	AKA575	3.0000	0.2000	1.5000	0.0700	1000.0000	30.0000	0.0	N	70.0000	500.0000
30	AKA898	10.0000	0.15000	0.0	L	0.0300	1500.0000	7.0000	1000.0000	10.0000	0.0
E 1	AK1738	7.0000	1.5000	0.1500	0.2000	700.0000	30.0000	300.0000	15.0000	300.0000	1.5000
2	AK1739	1.5000	0.0700	0.7000	0.1500	300.0000	30.0000	30000.0000	30.0000	0.0	L
3	AK1746	10.0000	1.5000	2.0000	0.5000	3000.0000	7.0000	10000.0000	30.0000	0.0	L
4	AK1752	15.0000	0.7000	3.0000	0.1000	500.0000	70.0000	10000.0000	15.0000	0.0	L
5	AK1755	20.0000	1.0000	1.5000	0.1000	500.0000	70.0000	7000.0000	10.0000	0.0	L
6	AK1701	20.0000G	1.5000	0.7000	0.3000	1500.0000	100.0000	10000.0000	300.0000	500.0000	1.0000
7	AK1702	20.0000	1.0000	1.5000	0.2000	3000.0000	100.0000	10000.0000	500.0000	150.0000	1.0000
8	AK1703	20.0000	3.0000	0.3000	0.7000	200.0000	70.0000	10000.0000	2000.0000	150.0000	1.0000
9	AK1705	20.0000G	1.0000	0.1500	0.3000	70.0000	10000.0000	10000.0000	2000.0000	100.0000	2.0000
10	AK1706	15.0000	5.0000	2.00000	0.0700	5000.0000G	15.0000	15000.0000	150.0000	0.0	2.0000
E 1	AKA400	15.0000	1.5000	0.2000	0.3000	70.0000	2.0000	300.0000	2000.0000G	0.0	1.0000
2	AKA981	20.0000G	0.3000	0.0700	0.1500	70.0000	5.0000	10000.0000	2000.0000G	100.0000	0.0
3	AK1683	20.0000G	0.1500	0.0300	0.0300	70.0000	10.0000	10000.0000	1500.0000	0.0	L
4	AKA388	20.0000G	0.1500	0.0	L	0.0300	70.0000	10000.0000	30.0000	0.0	L
5	AKA389	3.0000	0.20000	0.0	L	0.0700	70.0000	10000.0000	30.0000	700.0000	1.5000
6	AKA399	20.0000	0.3000	0.0700	0.0300	100.0000	3.0000	10000.0000	2000.0000	0.0	L
7	AKA971	20.0000G	0.7000	0.0700	0.1500	15.0000	15.0000	10000.0000G	2000.0000G	100.0000	0.0
8	AMG452	0.2000	0.0	L	0.7000	50.0000	3.0000	300.0000	30.0000	100.0000	0.0
9	AMG455	0.7000	7000.0000	0.7000	1.5000	100.0000	1.5000	3000.0000	70.0000	200.0000	1.0000
10	AK1707	0.7000	0.7000	0.7000	0.0700	150.0000	7.0000	150.0000	0.0	N	0.0

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ORWELL RIVER MINE

SOUTHERN FOLK MINE

HIGHMAN RIVER MINE

SOUTHERN FOLK MINE

HIGHMAN RIVER MINE

SOUTHERN FOLK MINE

TABLE 3 - P-2

MAP NO.	SAMPLE	BI PPM	CD PPM	CO PPM	CR PPM	CU PPM	LA PPM	MO PPM	NB PPM	NI PPM	PB PPM
		N	N	N	N	N	N	N	N	N	N
5 / AK1723	0.0	20.0000	0.0	0.0	0.0	L 150.0000	0.0	L 15000.0000	0.0	L 15000.0000	
2 AK1722	70.0000	500.0000G	0.0	N	0.0	L 15000.0000	0.0	L 15000.0000	0.0	L 20000.0000G	
3 AK1711	0.0	N	0.0	N	0.0	L 15.0000	0.0	L 20000.00006	15.0000	N	15.0000
4 AK4912	0.0	N	0.0	N	0.0	L 50.0000	7000.0000	0.0	L 10.0000	0.0	N
5 AK4910	0.0	N	0.0	N	0.0	L 50.0000	15000.0000	0.0	L 10.0000	20.0000	70.0000
6 AK4916	0.0	N	0.0	N	0.0	L 30.0000	30000.0000	0.0	N 0.0	15.0000	50.0000
7 AK4559	100.0000	0.0	N	0.0	N	L 70.0000	20000.0000G	0.0	N 10.0000	0.0	L 150.0000
8 AK4560	30.0000	0.0	N	20.0000	0.0	N	L 70.0000	15000.0000	0.0	N 10.0000	20.0000
9 AK4567	30.0000	0.0	N	10.0000	0.0	N	L 30.0000	20000.0000G	0.0	N 0.0	70.0000
10 AK4568	0.0	N	0.0	N	2.0000	N	L 70.0000	15000.0000	0.0	N 15.0000	10.0000
// AK4584	0.0	N	100.0000H	100.0000	150.0000	N	L 20000.0000G	0.0	N 10.0000	70.0000	30.0000
/2 AK4586	0.0	N	150.0000	0.0	N	10.0000	500.0000	0.0	N 0.0	0.0	L 15000.0000
/3 AK4587	0.0	N	50.0000	50.0000	100.0000	N	L 20000.0000	0.0	N 15.0000	20.0000	70.0000
/4 AK4588	0.0	N	200.0000	0.0	N	10.0000	700.0000	0.0	N 7.0000	0.0	N 20000.0000G
/5 AK4591	0.0	N	500.0000G	7.0000	10.0000	N	L 1000.0000	5.0000	N 5.0000	15000.0000	
/6 AK4592	0.0	N	300.0000	0.0	L	0.0	N	0.0	N 0.0	5.0000	20000.0000G
/7 AK1502	30.0000	0.0	N	0.0	L	15.0000	700.0000	0.0	N 0.0	0.0	L 10.0000
/8 AK1505	30.0000	0.0	N	15.0000	15.0000	N	L 10.0000	3000.0000	0.0	N 0.0	10.0000
/9 AK1504	0.0	N	0.0	N	5.0000	N	L 10.0000	20000.00006	150.0000	N 5.0000	50.0000
20 AK4006	0.0	N	300.0000	0.0	N	10.0000	3000.0000	0.0	N 0.0	15.0000	20000.0000
21 AK4049	0.0	N	20.0000	0.0	N	0.0	L	300.0000	0.0	N 10.0000	0.0
Z2 AK4012	0.0	N	0.0	N	0.0	N	L 15.0000	20.0000	7.0000	N 0.0	L 10.0000
Z3 AK1827	0.0	N	150.0000	0.0	L	10.0000	700.0000	0.0	N 0.0	300.0000	700.0000
Z4 AK4525	0.0	N	70.0000	7.0000	10.0000	N	L 300.0000	0.0	N 10.0000	5.0000	150.0000
Z5 AK4527	0.0	N	0.0	N	10.0000	N	L 150.0000	0.0	N 10.0000	10.0000	700.0000
Z6 AK4530	0.0	N	0.0	N	10.0000	N	L 100.0000	0.0	N 0.0	10.0000	1000.0000
Z7 AK4573	0.0	N	100.0000H	150.0000	10.0000	N	L 20000.0000G	0.0	N 10.0000	5.0000	300.0000
Z8 AK4574	70.0000	0.0	N	20.0000	30.0000	N	L 20000.0000	20.0000	N 5.0000	10.0000	150.0000
Z9 AK4575	50.0000	0.0	N	0.0	L	0.0	N	300.0000	20.0000	N 5.0000	7.0000
Z10 AK4898	0.0	N	0.0	N	0.0	N	L 150.0000	0.0	N 0.0	15.0000	5.0000
E / AK1738	30.0000	0.0	N	10.0000	30.0000	N	L 10000.0000	0.0	N 7.0000	10.0000	30.0000
Z AK1739	70.0000	0.0	N	30.0000	15.0000	N	L 15.0000	15.0000	N 0.0	L 30.0000	300.0000
Z3 AK1746	0.0	L	70.0000	150.0000	200.0000	N	L 70.0000	150.0000	N 150.0000	1000.0000	15000.0000
4 AK1752	30.0000	0.0	N	30.0000	150.0000	N	L 70.0000	20000.00006	150.0000	N 100.0000	300.0000
3 AK1755	30.0000	20.0000	N	150.0000	150.0000	N	L 20.0000	20000.0000G	5.0000	N 150.0000	200.0000
6 AK1701	500.0000	0.0	N	150.0000	70.0000	N	L 100.0000	100.0000	N 7.0000	L 10.0000	150.0000
7 AK1702	1000.0000	0.0	N	20.0000	30.0000	N	L 15000.0000	0.0	N 7.0000	10.0000	150.0000
8 AK1703	0.0	N	20.0000	150.0000	150.0000	N	L 20.0000	15000.0000	0.0	N 10.0000	30.0000
9 AK1705	300.0000	0.0	N	70.0000	70.0000	N	L 15000.0000	0.0	N 0.0	10.0000	70.0000
10 AK1706	0.0	N	0.0	N	20.0000	N	L 70.0000	0.0	N 0.0	10.0000	15.0000
E / AK400	0.0	N	0.0	N	10.0000	N	L 100.0000	1500.0000	0.0	N 0.0	10.0000
Z2 AK4981	300.0000	0.0	N	150.0000	30.0000	N	L 15000.0000	1500.0000	N 5.0000	10.0000	150.0000
Z3 AK1682	1000.0000	0.0	N	1500.0000	20000.0000	N	L 1500.0000	7000.0000	0.0	N 150.0000	150.0000
Z4 AK4388	300.0000	0.0	N	200.0000	10.0000	N	L 20000.00006	0.0	N 7.0000	10.0000	150.0000
Z5 AK4389	10.0000	200.0000	N	0.0	N	L 300.0000	0.0	N 0.0	N 0.0	10.0000	0.0
Z6 AK4399	700.0000	0.0	N	3000.0000	10.0000	N	L 700.0000	0.0	N 7.0000	5.0000	300.0000
Z7 AK4971	700.0000	0.0	N	2000.0000	50.0000	N	L 5000.0000	0.0	N 5.0000	0.0	700.0000
Z8 AMG452	0.0	L	0.0	N	10.0000	N	L 10.0000	70.0000	0.0	N 0.0	0.0
Z9 AMG455	0.0	N	0.0	N	0.0	L	0.0	N	150.0000	0.0	15.0000
Z10 AK1707	0.0	L	30.0000	15.0000	15.0000	N	L 30.0000	1500.0000	0.0	N 0.0	30.0000

AREAS OF THE STYX RIVER BASIN

S. FORK RIVER RUSKARDWIN

RIVER RUSKARDWIN

RIVER RUSKARDWIN

TABLE 3 - P-3

MAP NO.	SAMPLE NO.	SB PPM	SC PPM	SN PPM	SR PPM	V PPM	W PPM	Y PPM	ZN PPM	ZR PPM	AU PPM
S- 1	AK1723	0.0	L	0.0	N	300.0000	0.0	L	10.0000	100.0000	0.0200L
2	AK1722	2000.0000	0.0	N	1000.0000	0.0	L	10.0000	10000.0000	150.0000	0.3000
3	AK1711	0.0	N	0.0	N	15.0000	0.0	L	10.0000	70.0000	0.0
4	AKA912	0.0	N	10.0000	700.0000	0.0	N	10.0000	300.0000	50.0000	0.1000
5	AKA910	0.0	N	15.0000	70.0000	150.0000	0.0	N	10.0000	300.0000	0.0200L
6	AKA916	0.0	N	10.0000	15.0000	200.0000	0.0	L	0.0	300.0000	0.0200L
7	AKA559	0.0	N	7.0000	200.0000	100.0000	300.0000	0.0	N	15.0000	0.0
8	AKA560	0.0	N	10.0000	200.0000	0.0	L	30.0000	10.0000	0.0	0.0200L
9	AKA567	0.0	N	10.0000	300.0000	0.0	L	10.0000	10.0000	0.0	0.0200L
10	AKA568	0.0	N	10.0000	1000.0000G	150.0000	150.0000	0.0	N	10.0000	500.0000
11	AKA584	0.0	N	7.0000	50.0000	150.0000	70.0000	0.0	N	10.0000	1500.0000
12	AKA586	0.0	N	0.0	N	300.0000	0.0	L	15.0000	0.0	N
13	AKA587	0.0	N	20.0000	30.0000	100.0000	150.0000	0.0	N	20.0000	10000.0000G
14	AKA588	100.0000	0.0	N	70.0000	0.0	L	15.0000	10000.0000	150.0000	0.0200L
15	AKA591	0.0	L	0.0	N	700.0000	0.0	L	15.0000	0.0	N
16	AKA592	150.0000	0.0	N	100.0000	0.0	L	15.0000	0.0	N	0.1000
17	AK1502	0.0	N	0.0	L	150.0000	30.0000	0.0	N	0.0	N
18	AK1505	0.0	N	0.0	L	50.0000	0.0	L	30.0000	10000.0000G	150.0000
19	AK1504	0.0	N	0.0	N	200.0000	0.0	L	20.0000	10000.0000	20.0000
20	AKA006	0.0	N	7.0000	1000.0000	0.0	L	15.0000	0.0	N	0.0200L
21	AKA049	0.0	N	0.0	N	1000.0000G	0.0	N	15.0000	0.0	N
22	AKA012	0.0	N	7.0000	200.0000	0.0	N	15.0000	0.0	N	0.2000
23	AK1827	0.0	L	7.0000	70.0000	0.0	N	15.0000	0.0	N	0.0200L
24	AKA525	0.0	N	0.0	N	0.0	L	15.0000	0.0	N	0.0800
25	AKA527	0.0	N	0.0	N	0.0	L	20.0000	0.0	N	0.0200L
26	AKA530	0.0	N	0.0	N	0.0	L	20.0000	0.0	N	0.0200L
27	AKA573	0.0	N	15.0000	1000.0000	0.0	L	15.0000	0.0	N	0.0200L
28	AKA574	0.0	N	15.0000	700.0000	150.0000	100.0000	0.0	N	10.0000	300.0000
29	AKA575	0.0	N	30.0000	100.0000	15.0000	15.0000	0.0	N	20.0000	500.0000
30	AKA898	0.0	N	0.0	N	1000.0000G	0.0	N	15.0000	0.0	N
E- 1	AK1738	0.0	N	7.0000	15.0000	150.0000	50.0000	0.0	N	15.0000	300.0000
2	AK1739	300.0000	0.0	N	0.0	N	0.0	L	30.0000	0.0	22.0000
3	AK1746	5000.0000	15.0000	30.0000	100.0000	150.0000	100.0000	0.0	N	10.0000	60.0000
4	AK1752	0.0	N	7.0000	300.0000	100.0000	150.0000	0.0	N	70.0000	0.7000
5	AK1755	0.0	N	15.0000	1000.0000	150.0000	150.0000	0.0	N	30.0000	12.4000
6	AK1701	1000.0000	10.0000	30.0000	150.0000	150.0000	10.0000	0.0	N	20.0000	12.8000
7	AK1702	3000.0000	5.0000	30.0000	150.0000	30.0000	15.0000	0.0	N	15.0000	16.0000
8	AK1703	100.0000	30.0000	50.0000	100.0000	300.0000	50.0000	0.0	N	15.0000	11.0000
9	AK1705	300.0000	15.0000	150.0000	0.0	L	150.0000	0.0	N	20.0000	200.0000
10	AK1706	7000.0000	0.0	L	0.0	N	1000.0000	30.0000	0.0	N	15.0000
H- 1	AKA400	0.0	N	15.0000	15.0000	0.0	L	150.0000	0.0	N	10.0000
2	AKA981	1500.0000	5.0000	0.0	N	0.0	N	50.0000	0.0	N	100.0000
3	AK1663	150.0000	5.0000	0.0	N	0.0	L	30.0000	0.0	L	10.0000
4	AKA388	0.0	N	0.0	N	30.0000	0.0	N	15.0000	0.0	N
5	AKA389	0.0	N	0.0	N	150.0000	0.0	N	15.0000	0.0	N
6	AKA399	150.0000	0.0	N	0.0	L	0.0	N	15.0000	0.0	N
7	AKA971	0.0	N	7.0000	0.0	N	0.0	L	70.0000	0.0	N
8	AMG452	10000.0000G	0.0	N	15.0000	0.0	L	20.0000	0.0	N	30.0000
9	AMG455	10000.0000G	0.0	N	0.0	N	100.0000	15.0000	0.0	N	50.0000
10	AK1707	0.0	L	0.0	N	0.0	N	20.0000	0.0	N	0.0

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TABLE 3 - P. 4

M&P.	SAMPLE NO.	FE PCT	MG PCT	CA PCT	TI PCT	MN PPM	AG PPM	AS PPM	B PPM	BA PPM	BE PPM
H 11	AK1728	20.0000	5.0000	1.0000	0.7000	700.0000	30.0000	500.0000	2000.0000G	0.0	L
H 12	AK1730	20.0000G	1.5000	0.5000	0.3000	200.0000	50.0000	0.0	N	2000.0000G	100.0000
H 13	AKA230	2.0000	0.0500	0.1000	0.0150	70.0000	0.7000	0.0	L	0.0	0.0
H 14	AKA161	10.0000	0.0200	0.0500	0.0	200.0000	100.0000	0.0	N	0.0	0.0
H 15	AKA169	20.0000G	0.0500	0.0100	0.0	70.0000	30.0000	0.0	N	0.0	0.0
H 16	AK1796	15.0000	2.0000	0.0700	0.0700	5000.0000G	3000.0000	7000.0000	15.0000	0.0	L

RIVER RIVER  
HARTMAN MUSKEWIM  
S. FORT NUNAVUT  
NUNAVUT RIVER -

TABLE 3 - P-5

M&P No.	SAMPLE	BI PPM	CD PPM	CO PPM	CR PPM	CU PPM	LA PPM	MD PPM	NB PPM	NI PPM	PB PPM
11	AK1728	0.0	N	0.0	N	0.0	N	70.0000	20000.0000G	0.0	N
12	AK1730	0.0	N	0.0	N	0.0	N	30.0000	20000.0000G	0.0	N
13	AKA230	0.0	N	0.0	N	5.0000	L	10.0000	0.0	N	0.0
14	AKA161	1000.0000G	500.0000G	30.0000	10.0000	700.0000	0.0	N	0.0	L	10.0000
15	AKA169	200.0000H	0.0	N	100.0000	15000.0000	0.0	N	30.0000	0.0	L
16	AK1796	300.0000	300.0000	0.0	N	0.0	L	15000.0000	0.0	N	0.0

RIVER MESA  
S. FORK RUGGEDUM  
NORTHERN RIVER

TABLE 3 - P. 6

MAP NO	SAMPLE	SB PPM	SC PPM	SN PPM	SR PPM	V PPM	W PPM	Y PPM	ZN PPM	ZR PPM	AU PPM
H-1 AKI728	0.0	L	70.0000	300.0000	0.0	L	700.0000	50.0000	30.0000	0.0	L
12 AKI730	0.0	N	15.0000	700.0000	0.0	L	300.0000	50.0000	70.0000	0.0	300.0000
13 AKA230	0.0	N	0.0	N	0.0	N	15.0000	0.0	N	0.0	N
14 AKA161	150.0000	N	0.0	N	0.0	N	0.0	N	0.0	N	0.1000
15 AKA169	0.0	N	0.0	N	0.0	N	15.0000	0.0	N	0.0	N
16 AKI796	10000.0000G	0.0	L	15.0000	0.0	N	15.0000	0.0	N	0.0	L
					100.0000		15.0000	0.0	N	200.0000	0.0
								10.0000	10000.0000G	0.0	N
									12.0000	0.0	L
										0.0200L	

RIVER RIVER  
 S. FDR KUNSTEN  
 HARTMAN RIVER -  
 RIVER RIVER